Queensland Competition Authority

Rural irrigation price review 2025-29: Seqwater

Draft report

June 2024

Submissions

Closing date for submissions: 16 September 2024

Public involvement is an important element of our decision-making processes. Therefore, we invite submissions from interested parties. We will take account of all submissions received within the stated timeframes. Submissions, comments or inquiries regarding this paper should be directed to:

Queensland Competition Authority
GPO Box 2257, Brisbane Q 4001
Tel (07) 3222 0555
www.qca.org.au/submissions

Confidentiality

In the interests of transparency, and to promote informed consultation, we intend to make all submissions publicly available. However, if a person making a submission believes that information in it is confidential, they should claim confidentiality over the relevant information (and state the basis for that claim). We will assess confidentiality claims in accordance with the *Queensland Competition Authority Act 1997*. Among other things, we will assess if disclosure of the relevant information is likely to damage a person's commercial activities, and we will consider the public interest.

Claims for confidentiality should be clearly noted on the front page of a submission, and relevant sections of the submission marked as confidential. The submission should also be provided in both redacted and unredacted versions. In the redacted version, all information claimed as confidential should be removed or hidden. In the unredacted version, all information should be exposed and visible. These measures will make it easier for us to make the remainder of the document publicly available. A confidentiality claim template is available at **www.qca.org.au/submission-policy.**

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Executive summary

We have been directed by the Treasurer of Queensland to review the irrigation pricing practices of Seqwater and Sunwater, and to recommend irrigation prices to apply from 1 July 2025 to 30 June 2029. The government will consider our recommendations when it determines irrigation prices but it is not bound to accept our recommendations.

This draft report explains how we reached our draft recommendations on Seqwater's irrigation pricing practices.[1] We appreciate the valuable contribution that stakeholders have made to our review so far. We welcome further feedback and comments on our draft report, which will assist us with the finalisation of our recommendations to the government.

Our draft recommendations are indicative and will be subject to further consideration before we provide our final report to the Treasurer.

Seqwater's customer engagement

Relative to the 2020 review, Seqwater's customer engagement has improved materially. Overall, we consider Seqwater's customer engagement to be fit-for-purpose given the relatively small size of its regulated irrigation business.

We consider that Seqwater's engagement program has informed customers and other stakeholders of key aspects of the price review process. Seqwater has also provided customers and other stakeholders with opportunities to participate and respond to its pricing proposal.

Seqwater's annual scheme-level consultation and its engagement on proposed cost inputs in developing its pricing proposal has led to less contention from customers on cost issues than in previous reviews. This is demonstrated by all the scheme-level customer reference groups (CRGs) generally endorsing the proposed costs in Seqwater's pricing proposal.[2] We have taken this into account in assessing the prudency and efficiency of Seqwater's cost forecasts.

Our draft position is to reduce Seqwater's proposed costs

Our draft position is that total allowable costs[3] for Seqwater over the price path period should be set at $37.4 million, which is $0.6 million (or 1.7%) lower than the total allowable costs (including QCA fees) proposed by Seqwater in its November 2023 pricing proposal.[4] This reflects our draft position on key cost drivers:

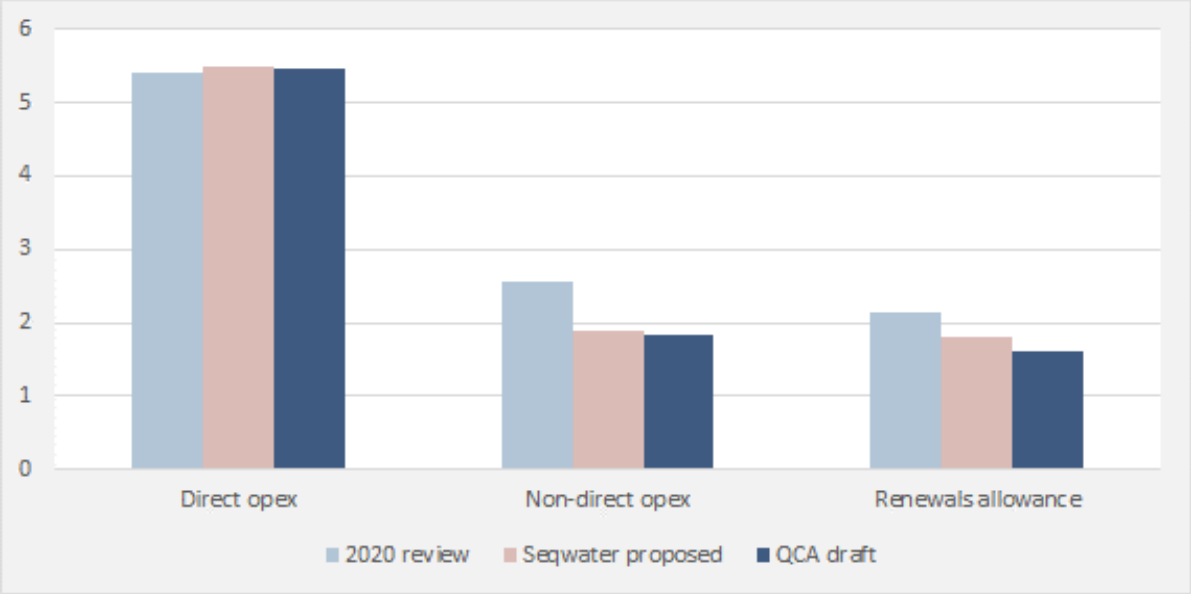
- our proposed operating expenditure (opex) allowance over the price path period of $31.3 million, which is $0.1 million (or 0.5%) higher than Seqwater's proposed opex[5]
- our proposed renewals allowance over the price path period of $6.6 million, which is $0.8 million (or 10.6%) lower than Seqwater's proposed allowance, reflecting:

[1] A separate draft report on Sunwater's irrigation pricing practices is available on our website.
[2] Seqwater, sub. 1, p. 7. The Logan River CRG indicated that it had some reservations about the costs of individual replacement meters and associated works (Seqwater, sub. 5, p. 8).
[3] Includes costs allocated to irrigation and non-irrigation customers in regulated schemes.
[4] Seqwater, sub. 1, p. 62; Seqwater pricing model 2023.
[5] This includes the reallocation of Seqwater's claim of $0.6 million in review event adjustments from the renewals allowance, since the referral requires this adjustment to be made to the opex allowance.

- actual renewals expenditure over the period 2018–19 to 2024–25 of $15.3 million, which is $1.3 million (or 8.0%) lower than Seqwater's proposed actual renewals expenditure
- forecast renewals expenditure over the price path period of $5.0 million (down $1.2 million or 19.9% lower than Seqwater's proposed renewals over this period), with forecast renewals expenditure over the planning period from 2029–30 to 2057–58 of $45.2 million (down $1.7 million or 3.6%).

Figure 1 compares our draft position on key cost categories with Seqwater's proposal and our 2020 review allowance.

Figure 1: Average annual allowable costs, by cost category ($ million, 2025–26 dollars)



Note: Our costs from the 2020 review are our recommended opex adjusted for the difference between forecast and actual inflation. These figures include costs allocated to irrigation and non-irrigation customers in regulated schemes.

Seqwater's actual opex has been within the recommended opex allowance from the 2020 review, adjusted for the difference between our forecast of inflation and actual inflation. This has allowed us to target our review on proposed cost categories that are higher than our recommended costs, which is mainly insurance.

Given our detailed assessment of the prudency and efficiency of Seqwater's opex and capital expenditure (capex) in the 2022 bulk water review, we focused our assessment for this review on irrigation-specific expenditure that was not reviewed as part of the 2022 bulk water review.

For each tariff group we set a draft price target and applied the pricing principles to reach our draft prices

Our approach to converting total allowable costs to our draft price targets for each tariff group is broadly consistent with the approach we applied in the 2020 review.

We reached our draft price recommendations by applying the government's pricing principles.[6] For each tariff group, we compared our draft price recommendations with the draft price target over the price path period. Overall, three of Seqwater's nine tariff groups will have prices at the price target

[6] With the exception of the Warrill Valley (high priority) tariff group.

in the first year of the price path period, with no further tariff groups reaching the price target by the end of the price path period.

We propose to retain the government policy review event

We propose to maintain the review event mechanism to address uncontrollable opex risk. Of the current list of review events, we propose to retain the government policy review event but remove the off-stream pumping, insurance, and electricity review events. We also propose to clarify the government policy review event definition and the criteria for assessing review event applications.

Next steps

We will be holding workshops on our draft report in July and August 2024. Information about the workshops is available on our website.

After the workshops, stakeholders are invited to provide written submissions on our draft report by **16 September 2024**. We will consider all submissions received by the due date in preparing our final report, which is due to the government by 31 January 2025.

Box 1: Seqwater review – draft recommendations

Seqwater draft recommendation 1

We recommend that prices for irrigation customers for each water supply scheme and distribution system should be set according to the prices set out in Appendix E, Tables 44 and 45.

Seqwater draft recommendation 2

We recommend that:

- termination fees applicable to customers in the Morton Vale Pipeline distribution system should be calculated as up to 11 times (including GST) the fixed (Part C) price target
- termination fees applicable to the Pie Creek distribution system should be calculated as up to 11 times (including GST) the recommended fixed (Part C) price
- Seqwater should have the discretion to apply a lower multiple to the relevant fixed price or waive the termination fee
- Seqwater should never recover any revenue shortfall from remaining customers upon exit of the scheme by another customer.

Seqwater draft recommendation 3

We recommend the following mechanisms to manage Seqwater's uncontrollable cost risk over the price path period:

- a review event mechanism for opex risk that provides for an adjustment to allowable costs if:
  - the following event occurs during the price path period:
    - an increase or decrease in costs caused by a change in government policy or regulatory requirement
  - the following criteria are met:
    - the event results in a change in total costs that is sufficiently material that it could not reasonably be met by an efficient business operating within business-as-usual budget constraints, through prudent reprioritisation of expenditure
    - the costs of the event are prudent and efficient
    - an adjustment has been made to the costs of the event for any factors that offset those costs
- an end-of-period true-up for prudent and efficient renewals and other capex.

1 Overview

The prices that Seqwater and Sunwater charge for providing irrigation services are determined by the government. To inform its decisions, the government periodically directs us, the Queensland Competition Authority (QCA), to undertake a review of the businesses' irrigation pricing practices, and to recommend irrigation prices. In making its decision, the government considers our recommendations, but is not bound by them.

This review is being conducting under a referral notice (referral) issued by the Treasurer in March 2023.[7] We have been directed to recommend irrigation prices for the period 1 July 2025 to 30 June 2029 (the price path period).

This draft report explains how we reached our draft recommendations on Seqwater's irrigation pricing practices. A separate report covers our review of Sunwater's irrigation pricing practices.

1.1 Seqwater's services

Seqwater is a government-owned statutory authority and monopoly provider of bulk water services in south-east Queensland.[8] Seqwater owns and operates a network of water supply assets, including dams, weirs, water treatment plants, manufactured water assets (the Western Corridor Recycled Water Scheme and the Gold Coast Desalination Plant) and pipelines.

Seqwater's main service is supplying treated bulk water to the retailers servicing 11 local government areas in south-east Queensland. The retailers then deliver the water to households and businesses through their distribution networks. Seqwater also supplies Toowoomba and Gympie regional councils, power stations operated by CleanCo Queensland and Stanwell Corporation, and around 1,200 irrigation customers across seven water supply schemes and two distribution systems.

The vast majority of the revenue Seqwater earns from water sales comes from supplying the distributor-retailers, with around 0.3% coming from irrigation customers.[9]

1.2 What we have been directed to do

We are required to review the prices that Seqwater charges for providing irrigation services in each of the water supply schemes and distribution systems specified in the referral. Irrigation services are defined as the supply of water or drainage services for irrigation of crops or pastures for commercial gain.[10]

In accordance with the referral, we must recommend prices for the core irrigation service – the storage and delivery of water to irrigation customers – that are consistent with the government's pricing principles.[11] The pricing principles constrain the increases required each year to reach the relevant price target, which is a price for each irrigation tariff group that recovers 'allowable costs'

[7] The referral (available on our website) was issued under section 23 of the *Queensland Competition Authority Act 1997*.
[8] Sunwater is the main provider of bulk water and irrigation services in regional and rural Queensland.
[9] Seqwater, *Annual report 2022–23*, August 2023, p. 39.
[10] Outside the scope of this review are prices for the irrigation services that Seqwater provides in the Central Brisbane River water supply scheme, and prices for non-irrigation services, such as the supply of water to local councils, water retailers and industrial customers.
[11] There are a few exceptions to the requirement to apply the transitional element of the pricing principles (referral, para. B(1.1)(a)).

allocated to that tariff group. Allowable costs reflect a scheme's prudent and efficient costs but exclude allowances for capital expenditure (capex) incurred prior to 1 July 2000 to build the existing assets and capex on dam safety upgrades.

The government subsidises prices by providing a community service obligation (CSO) payment to Seqwater to make up the difference between the revenue received from irrigation customers and the irrigation share of allowable costs, and to cover the costs of the irrigation share of dam safety upgrade capex. As Seqwater does not earn a return on pre-2000 assets, this provides an additional subsidy to customers.

We are also required to recommend other prices (such as termination fees) and to recommend appropriate price review triggers and other mechanisms to manage the risks associated with material changes in costs outside Seqwater's control.[12]

1.3 Our approach to the review

This is our third irrigation pricing review. The first reviews were completed in 2012 (for Sunwater) and 2013 (for Seqwater) and the second (combined) review was completed in January 2020.[13]

We advised Seqwater that we expected its pricing proposal to be informed by meaningful engagement with customers and other stakeholders. We assessed Seqwater's customer engagement against the engagement principles set out in our March 2023 guidelines for pricing proposals (Chapter 2).

We provide an overview of the steps we followed to reach our draft price recommendations (Chapter 3), followed by the detailed step-by-step assessment (Chapters 4 to 10). We consider the impacts of our draft price recommendations on irrigation customers and estimate the revenue shortfall for each tariff group with draft prices below the draft price target (Chapter 11). We also assess mechanisms to manage Seqwater's uncontrollable cost risk (Chapter 12).

In conducting our review we considered each of the matters we are required to consider in the referral and the *Queensland Competition Authority Act 1997* (QCA Act).[14] 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. We explain how we have considered each of these matters in Appendix F.

Regulatory tools are limited in their ability to achieve multiple and potentially conflicting goals or objectives. In using our judgement to weigh up and take the various matters into account, we placed greater weight on 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.

[12] Referral, para. B(1.1)(a)–(b).
[13] See Appendix A for a summary of our price recommendations from the 2020 review and the government's decision about prices to apply in the current period – 1 July 2020 to 30 June 2025.
[14] In accordance with sections 24(1)(b) and 26 of the QCA Act.

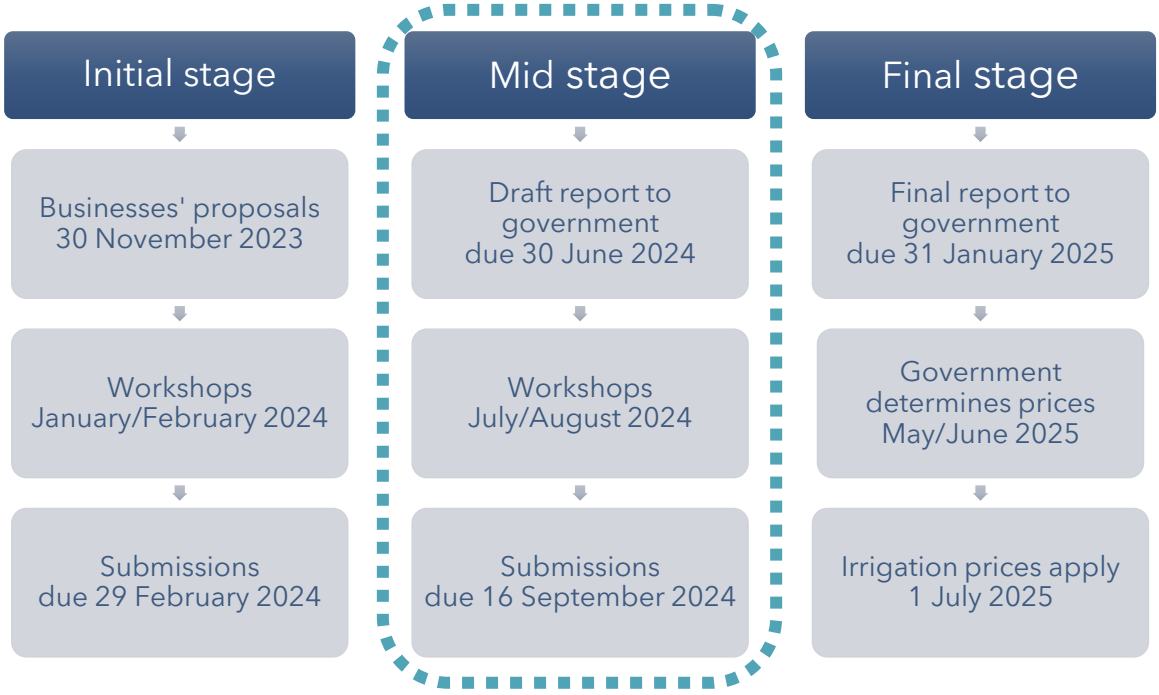
1.4 Consultation process and timetable

Our review formally began when the businesses submitted their pricing proposals at the end of November 2023.

We held stakeholder workshops in January and February 2024.[15] Workshops were held in locations with sufficient interest from stakeholders.[16] The purpose of the workshops was to understand the issues of importance to stakeholders, and to provide information to facilitate submissions. The workshops also provided an opportunity for stakeholders to share their views and ask questions.

Initial submissions were invited by 29 February 2024. We have carefully considered all submissions received by the due date in preparing this draft report.[17]

Figure 2: Review timetable



Draft report consultation

Consultation on the draft report will begin with workshops in July and August 2024. Information about the workshops is available on our website. As with our initial round of workshops, we will not document workshop discussions as formal submissions, but we will publish a summary of the issues raised and expect the discussions will inform our ongoing assessment and final recommendations.

After the workshops, stakeholders are invited to provide written submissions on our draft report by **16 September 2024**. Further information about how to make a submission is provided at the start of this report.

Submissions do not necessarily need to be detailed or comprehensive – brief comments on specific issues are also welcome. We also welcome collaboration between stakeholders to provide joint submissions on an issue. Wherever possible, stakeholders should provide evidence to support their statements.

[15] We also held one online meeting at the request of representatives from Mallawa Irrigation.
[16] See Appendix B for a list of the workshop locations and the number of attendees at each location.
[17] See Appendix B for a list of submissions received.

Keeping up to date with our review

To keep up to date with our review, stakeholders should regularly check our website or subscribe to receive email alerts. Further information can be requested by using the contact form on our website or by phoning 07 3222 0555.

2 Customer engagement

The pricing proposal guidelines we published in March 2023 outline our expectations for the water businesses in terms of engaging with their customers and other stakeholders during the development of pricing proposals. In this chapter, we assess Seqwater's customer engagement based on the engagement principles in these guidelines.[18]

We consider that Seqwater's engagement aligned with these principles in several ways. For example, Seqwater:

- sought to understand the views of customers by using a range of approaches including scheme-level customer reference groups (CRGs), scheme-level forums and surveys (section 2.1.1)
- engaged on issues that could reasonably influence services and prices, including deliverables and service levels; actual and proposed cost inputs; and proposed price targets and prices (section 2.1.2)
- engaged on an ongoing basis since the 2020 review and early in this review process as soon as practicable after the Treasurer issued the referral in March 2023 (section 2.1.3)
- developed its proposal with some consideration of feedback from customers (section 2.1.4).

A key objective of our pricing proposal guidelines was better customer engagement. Relative to the 2020 review, Seqwater's engagement has improved materially. Overall, we consider that Seqwater's engagement is generally fit-for-purpose given the relatively small size of it regulated irrigation services.

2.1 Assessment of Seqwater's engagement

2.1.1 Structure engagement to promote an understanding of customer needs

Overall, our preliminary view is that Seqwater has undertaken an engagement program that was appropriate for its customers and operating environment.

Seqwater has expanded on its engagement approach since the 2020 review in response to our recommendation from the 2020 review for it to broaden its engagement by adopting other engagement channels.[19] Measures that Seqwater has implemented include CRGs in each of its regulated schemes; annual customer surveys; regular customer newsletters and SMS messaging.[20]

Seqwater's engagement on its pricing proposal for this review has built on its established engagement channels since the 2020 review with a three-phase program of scheme forums and CRG meetings; a dedicated project web page that include presentations and minutes for all meetings held; individual scheme reports; and an online feedback system.

Seqwater said that CRGs provided a formal framework for it to regularly consult, on a scheme basis with a broad section of customers on issues relevant to the performance of its service delivery obligation to customers. We consider that Seqwater has effectively used scheme-level CRGs to

[18] QCA, *Rural irrigation price review 2025–29*, guidelines for pricing proposals, March 2023, p. 11.
[19] See QCA, *Rural irrigation price review 2020–24, Part C: Seqwater*, final report, January 2020, p. 79.
[20] Seqwater, sub. 1, p. 22; individual scheme reports (e.g. Seqwater, sub. 2, p. 7).

identify and understand customer preferences, and to obtain feedback from CRGs on how it should best present information to the broader customer base.

The three-phase engagement program allowed Seqwater to:

- in the initial phase, inform customers of its approach and understand key issues
- in the second phase, outline draft costs and prices and key cost drivers and receive more specific customer feedback
- in the final phase, provide responses to all customer feedback and confirm final prices.

Seqwater has generally tailored its engagement methods to align with the nature of the information being communicated. For example, Seqwater has used a range of methods to communicate information based on feedback from scheme-level CRGs, evidenced by its presentations, individual scheme reports and annual service performance reports (SPRs).

2.1.2 Target engagement on matters that customers value and can influence

Seqwater said that it consulted with its CRGs in designing its engagement program, which covered scheme-level service issues of importance to customers and matters that had a material impact on services provided and prices. These topics covered deliverables and service levels; actual and proposed cost inputs; and price targets and proposed prices.

Seqwater said that its annual engagement on its scheme-level SPRs discusses performance against service standards as well as updates on actual expenditure relative to forecast.[21] It explained that for this pricing proposal, its engagement focused on explaining proposed costs, as well as other key issues of importance to customers.

Seqwater said that feedback received from customers in in its engagement process identified issues of importance including:

- confirmation of existing service standards
- an understanding of proposed prices and the drivers of any increases from current prices
- price stability
- alternative approaches to fixed cost recovery for schemes with poor reliability
- an online water accounting portal to manage customers' water allocations.[22]

We consider that Seqwater provided customers with sufficient detail on actual and proposed costs to allow scrutiny of costs to help ensure cost proposals were prudent and efficient. In the second phase of its engagement process, Seqwater provided:

- detailed estimates of actual and proposed costs (including at the detailed activity by cost-type level) in comparison with our recommended costs
- key scheme-level renewals projects over the current and next price path period
- key drivers of price impacts from the 2020 review on the current proposed prices.

Seqwater also discussed concerns raised by customers and sought to address these concerns.

Seqwater was able to justify to us how its proposal met the outcomes sought by customers or, where relevant, why its proposal was not revised to address some of the outcomes sought. In the final

[21] Seqwater, sub. 1, p. 23.
[22] Seqwater, sub. 1, pp. 22–23.

phase of its engagement process, Seqwater also provided responses to all customer feedback and confirmed final costs and prices in the final phase.[23]

2.1.3 Ensure ongoing engagement within timeframes necessary to inform decision-making

Seqwater has maintained ongoing engagement since the 2020 review and promptly initiated engagement for its pricing proposal following the issuance of the referral in March 2023.

Since the 2020 review, Seqwater has continued to hold annual scheme-level customer forums to discuss SPRs (formerly known as network service plans), which cover performance against service standards, the performance of costs at the detailed activity by cost type level (compared with our recommended costs), and expenditure planning.

As noted in section 2.1.1, Seqwater has expanded its ongoing engagement process since the 2020 review. Engagement channels such as the CRGs, SPRs, annual customer forums and the annual survey all provide an effective framework of ongoing customer engagement.

2.1.4 Ensure engagement informs planning and decision-making

Seqwater demonstrated that its ongoing engagement had identified key customer values and priorities, which it then used to plan its engagement program for its pricing proposal.

Seqwater said that the initial phase of its engagement provided an opportunity to hear customer feedback on issues of potential relevant to its pricing proposal.[24] Seqwater said that in its final phase of engagement it explained how customers' feedback was ultimately reflected in the final (draft) pricing proposals.

Seqwater's actions in response to feedback from its CRGs and broader customer base provide some evidence that its engagement influenced its pricing proposal. For instance, Seqwater:

- developed its three-phase engagement program in consultation with its scheme-level CRGs
- reviewed specific aspects of its proposed costs raised by customers and in some cases developed revised cost estimates, in response to concerns about specific renewals projects[25]
- modified its approach for estimating water usage forecasts to address the impact of historical local circumstances, in response to scheme-specific concerns about these forecasts[26]
- developed a scheme-specific pricing approach for Warrill Valley water supply scheme customers, in response to a preference expressed by customers for price stability[27]
- delivered a cost-effective water accounting system after customers expressed that they would like an online portal where they can manage their water allocations, enter meter reads and monitor usage and remaining balances.[28]

[23] See, for example, Seqwater, *Customer Reference Group – Meeting Summary*, Logan River water supply scheme, 14 November 2023.
[24] Seqwater, sub. 1, p. 24.
[25] For example, Seqwater removed specific renewals projects that were determined to be recreational in Mary Valley (Seqwater, sub. 6. p. 9) and Warrill Valley (Seqwater sub. 7, p. 9). Seqwater also adjusted the contingency amounts for metering renewals projects in Logan River (Seqwater sub. 5, p. 8) and Mary Valley (Seqwater sub. 6, p. 9).
[26] For example, in Central Lockyer water supply scheme (Seqwater, sub. 3, p. 9) and Mary Valley water supply scheme (Seqwater sub. 7, p. 9).
[27] Seqwater, sub. 7, pp. 15–17.
[28] Seqwater, sub. 1, p. 38.

Seqwater said that after providing responses to issues customers raised and presenting final proposed costs and prices, each scheme-level CRG generally endorsed the final proposed costs in the pricing proposal.[29]

2.2 Implications for our broader assessment

Overall, we consider that Seqwater's extensive engagement program has informed customers and other stakeholders of key aspects of the price review process. Seqwater has also provided customers and other stakeholders with opportunities to participate and respond to its pricing proposal.

Seqwater's annual SPR consultation and its engagement on proposed cost inputs in developing its pricing proposal has led to less contention from customers on cost issues. This is demonstrated by the general endorsement of Seqwater's proposed costs by CRGs, with only some reservations raised on the metering spend in Logan River water supply scheme (see Chapter 5 for our assessment of this cost). Seqwater customers did not raise any cost concerns in stakeholder submissions; historical metering renewals in Central Lockyer water supply scheme were raised only at the Gatton workshop in January 2024.[30] We have taken this into account in assessing the prudency and efficiency of Seqwater's cost forecasts (see Chapters 4 and 5).

[29] Seqwater, sub. 1, p. 7, sub. 2, p. 8, sub. 3, p. 10, sub. 4, p. 8, sub. 5, p. 8, sub. 6, p. 9, sub. 7, p. 9. Despite having no objections to the proposed costs, the Logan River CRG still had reservations about the costs of individual replacement meters and associated works. However, it felt that we will look at these costs to assess their prudency and efficiency (Seqwater, *Logan River WSS, Customer Reference Group – meeting summary*, 14 November 2023).

[30] Gatton workshop summary at QCA, *Irrigation price investigation 2025–29*, QCA website.

3 Approach to setting draft prices

We are required to recommend prices in accordance with the requirements in the referral.[31] For the core irrigation service, the key requirement is that we are to recommend prices for each tariff group that transition towards a price target that would recover allowable costs, in accordance with the government's pricing principles.[32]

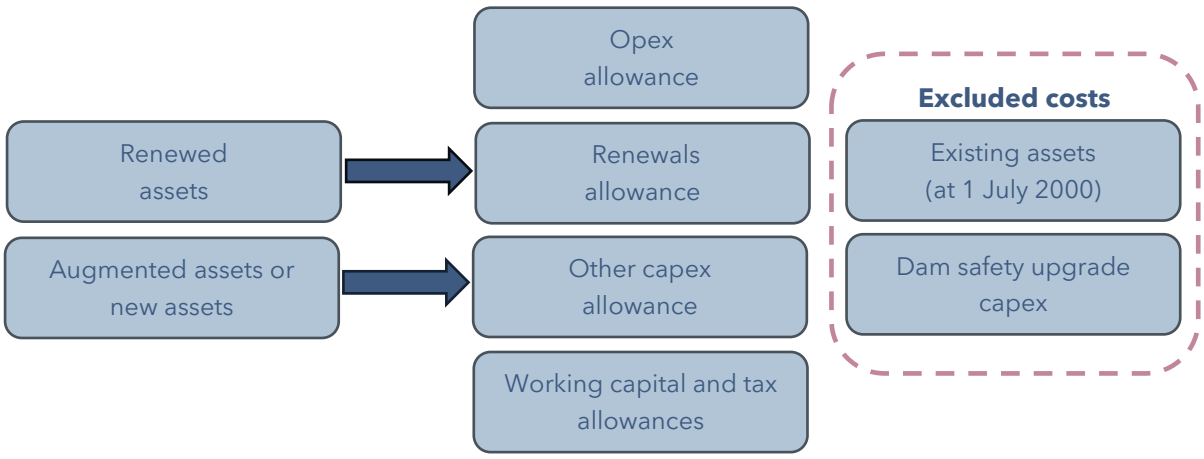
Our draft price recommendations were informed by our assessment of Seqwater's pricing proposal and stakeholder submissions. We followed these steps to calculate prices:

1. Determine the prudency and efficiency of costs – to ensure that prices reflect the efficient costs of service levels that are necessary to meet regulatory obligations[33] and service levels agreed with customers.[34]
2. Establish the price target for each irrigation tariff group – by allocating costs between schemes, tariff components, customer priority groups and tariff groups.
3. Derive irrigation prices that transition towards the price target, in accordance with the government's pricing principles.[35]

3.1 Determining the prudency and efficiency of costs (Chapters 4 to 7)

We assessed the prudency and efficiency of the costs of supplying customers (irrigation, urban and industrial) in the specified schemes. The costs we assessed are those allowable under the referral. Excluded from allowable costs are allowances for capital expenditure (capex) incurred before 1 July 2000 to build the existing assets and capex on dam safety upgrades (Figure 3).

Figure 3: Allowable costs under the referral



Note: Seqwater has not proposed any capex associated with augmentation of existing assets or new assets, so our review has not required an assessment of the other capex allowance component.

[31] Section 24(1)(d) of the QCA Act.
[32] There are a few exceptions to the requirement to apply the transitional element of the pricing principles (referral, para. B(1.1)(a)).
[33] Including regulatory and legislative obligations, such as those relating to water planning and dam safety, imposed by government and other regulatory bodies.
[34] Including customer service standards.
[35] We separately calculate termination fees for the Morton Vale Pipeline and Pie Creek distribution systems.

We used the building block approach to determine prudent and efficient allowances for each component of allowable costs:

- an operating expenditure (opex) allowance – the ongoing costs of running the business and maintaining assets, including operations, maintenance and administration costs[36]
- a renewals expenditure allowance – an appropriate allowance for the prudent and efficient costs of renewing existing assets, reflecting our assessment of prudent and efficient renewals expenditure, the opening annuity balance and an appropriate rate of return
- tax – consistent with our post-tax nominal approach to the weighted average cost of capital (WACC), we include an allowance for tax as part of total costs.[37]

Given our detailed assessment of the prudency and efficiency of Seqwater's opex and capex in the 2022 bulk water review, we have focused our assessment for this review on irrigation-specific expenditure that was not reviewed as part of the 2022 bulk water review.

To determine total allowable costs, we add the components together and then deduct the revenue Seqwater earns from other sources.

3.2 Setting a price target for each tariff group (Chapters 8 and 9)

The next step is to convert Seqwater's total allowable costs to a price target for each tariff group.

To derive allowable costs at the scheme level, we first make adjustments between schemes to ensure that costs are allocated to the appropriate beneficiaries. We then convert allowable costs at the scheme level to a price target for each tariff group by:

- allocating costs between fixed and volumetric tariff components
- allocating costs between priority groups
- allocating costs between tariff groups (where applicable)
- converting allocated costs into a unit cost for each tariff component, using forecast volumes.

In accordance with the referral, we 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 forecast inflation.[38]

3.3 Transitioning irrigation prices to the price target (Chapter 10)

The last step to reach our draft price recommendations is to apply the government's pricing principles to establish the transitional path to the price target for each tariff group.[39] If customers reach the price target during the price path period, their prices reflect the price target for the rest of the period.[40]

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[36] We also make an adjustment to the opex allowance for the cost of review events that occurred in the current price path period.
[37] Seqwater did not propose a working capital allowance for this review (Seqwater, sub. 1, p. 113). In the 2020 review, we did not provide Seqwater with a working capital allowance, as it receives a significant portion of revenue from customers in advance, rather than in arrears (QCA, *Rural irrigation price review 2020–24, Part C: Seqwater*, final report, January 2020, pp. 31–32).
[38] Referral, Sch. 2, para. A.
[39] Unless the tariff group is an exception to the requirement to apply the transitional element of the pricing principles (referral, para. B(1.1)(a)).
[40] Referral, Sch. 2, para. A.

4 Operating expenditure

This chapter sets out our draft position on the prudent and efficient level of operating expenditure (opex) that Seqwater may recover from regulated schemes over the price path period. This includes all opex for these regulated schemes, including costs allocated to irrigation and non-irrigation customers.

Seqwater submitted a base-step-trend approach for its forecast opex. We assessed Seqwater's opex and found:

- the prudent and efficient level of baseline opex should be set at $29.4 million (section 4.2), with corresponding step changes of $1.3 million over the price path period (section 4.3)
- review event adjustments are appropriate for material changes in costs related to off-stream pumping events and regulatory events over the current price path period (section 4.5).

Consistent with the 2022 bulk water review, we consider that the continued implementation of Seqwater's efficiency program is a superior approach to applying an efficiency target (section 4.4).

Overall, our draft position is to set the prudent and efficient level of opex over the price path period at $31.3 million (Table 1).

Table 1: QCA draft position for Seqwater's opex ($ million, nominal)

	QCA draft					Seqwater proposal	Difference
	2025-26	2026-27	2027-28	2028-29	Total		
Baseline opex	7.0	7.2	7.4	7.7	**29.4**	29.6	**(0.2)**
Step changes	0.3	0.3	0.3	0.4	**1.3**	1.5	**(0.2)**
Total forecast	**7.3**	**7.5**	**7.8**	**8.1**	**30.7**	**31.1**	**(0.4)**
Review event adjustments	0.1	0.1	0.1	0.1	**0.6**	–	**0.6**
Total allowance	**7.5**	**7.7**	**7.9**	**8.2**	**31.3**	**31.1**	**0.1**

Notes: Includes opex allocated to irrigation and non-irrigation customers in regulated schemes. Includes QCA fees in step changes. Review event adjustments were included in the renewals allowance in Seqwater's proposal. Totals may not add due to rounding.
Source: Seqwater, sub. 1; Seqwater pricing model 2023; QCA analysis.

We consider that our proposed total opex reflects a reasonable overall allowance for Seqwater to manage its assets, prioritise expenditures and deliver bulk and distribution services. Our proposed opex does not represent the amounts that Seqwater should allocate to specific operational, maintenance and administrative activities. Rather, it provides flexibility for Seqwater to redirect cost savings to new initiatives or to mitigate unexpected cost increases.

4.1 Our assessment approach

In assessing the prudency and efficiency of opex from 1 July 2025 to 30 June 2029, we focused on areas that are material, specifically examining the proposed base year, step changes and escalation.

We have taken our findings in relation to the 2022 bulk water review into account, as required by the referral. In that review, we assessed the prudency and efficiency of Seqwater's proposed opex (including irrigation-related costs) for the period 1 July 2018 to 30 June 2028.

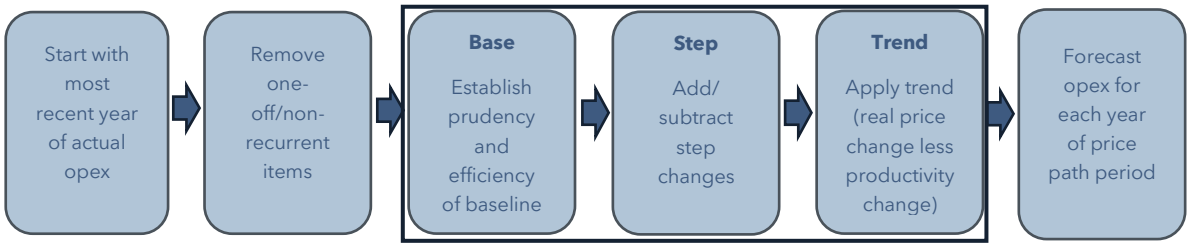
Base-step-trend approach

Our approach to assessing Seqwater's proposed opex over the price path period involves:

- determining an appropriate baseline level of prudent and efficient recurrent expenditure
- reviewing material step changes in the efficient baseline opex over the price path period
- ensuring appropriate adjustments for trend growth, including input price inflation and productivity growth over the price path period.

Our overall approach is illustrated in Figure 4.

Figure 4: Base-step-trend approach



We generally consider that the opex allowance should be set at a broad level, allowing Seqwater to manage its assets, meet its regulatory obligations, 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.

Baseline opex

We prefer to use actual (revealed) opex based on the most recently available data to establish baseline opex.

In establishing an appropriate baseline, we first considered whether Seqwater had made appropriate adjustments for one-off or non-recurrent items in the base year, such as:

- removing expenditures that are non-recurrent in nature
- including expenditures that, while not currently being incurred, can reasonably be expected over the course of the price path period and are recurrent in nature
- accounting 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 key step in our assessment of the prudency and efficiency of adjusted baseline opex is comparing this with our recommended expenditure from the 2020 review. While Seqwater's adjusted baseline opex at the total regulated scheme level is lower than our recommended allowance from the 2020 review[41], there are some regulated schemes with higher than recommended opex.

For these schemes, we have focused on cost categories that have a material impact on the price target at the tariff group level (particularly if this results in a material increase in the price target for specific tariff groups). For these cost categories, we have looked at drivers of the increases since the 2020 review.

[41] Adjusted for the difference between the forecast inflation from our 2020 review and actual inflation since 2020–21.

Step changes

We consider that proposed step changes should be 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 otherwise be mitigated.

In assessing proposed step changes, we consider whether they satisfy at least one of these requirements:

- The change is necessary to fulfil new (or changed) binding statutory or regulatory obligations and constitutes a reasonable estimate of the efficient incremental costs of fulfilling the new (or changed) binding statutory or regulatory obligation.
- The change is reasonably required to achieve an outcome that is explicitly endorsed by customers or broadly accepted changes in community expectations in relation to corporate responsibility.
- The change represents cyclical activities that are not within annual business-as-usual budgets.

We also ensured that proposed step changes were not already included in other components of the opex allowance.

Trend growth

We assessed Seqwater's proposed adjustments for trend growth over the price path period, including expected input price inflation (Chapter 6) and productivity improvements.

Prudency and efficiency

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

- operate or maintain the relevant service
- meet legal or regulatory obligations[42]
- 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.

Materiality

We formed a view on prudency and efficiency based on the overall proposal before us. We would 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
- there is evidence of proper consultation and agreement with customers.

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

4.2 Baseline opex

As Seqwater's adjusted baseline opex of $6.7 million[43] in 2023–24 is significantly lower than our recommended allowance of $7.4 million[44] from the 2020 review[45], and all scheme-level customer reference groups have reportedly supported their scheme level opex[46], our approach to reviewing Seqwater's baseline opex will focus on:

- ensuring that baseline opex has been appropriately adjusted for one-off and non-recurrent items (section 4.2.1)
- assessing cost categories that have a material impact on the price target at the tariff group level (particularly if this results in a material increase in the price target for specific tariff groups) (section 4.2.2).

4.2.1 Establishing baseline opex

For all cost categories other than labour costs, Seqwater proposed using actual opex for 2022–23 as the basis for determining baseline opex.[47] Seqwater used budgeted labour costs for 2023–24.

Seqwater presented its proposed baseline opex in 2023–24 dollars by escalating 2022–23 actual non-labour costs by general CPI inflation for most cost categories and by the estimated actual escalation for insurance costs (see section 6.2.2).

Seqwater said that based on its review of actual 2022–23 costs, only dam safety inspections were identified as non-recurrent costs. Given that these inspections are cyclical costs that occur less frequently than annually, Seqwater proposed including them as step changes in the relevant years of the price path period.[48] We review this cost item in section 4.3.3.

Seqwater said that it used 2023–24 budgeted rather than 2022–23 actual labour costs as the poor use of work orders had resulted in the underallocation of labour to the regulated schemes.[49] We accept that 2022–23 actual total labour costs of $1.2 million (in 2023–24 dollars) are materially lower than other recent historical costs, with the average actual labour costs from 2018–19 to 2021–22 at around $1.7 million (in 2023–24 dollars). We also note that 2023–24 budgeted labour costs ($1.3 million) are only slightly higher than 2022–23 actuals, with the difference not material at the scheme or total level. We have therefore accepted this adjustment to reflect a more typical operating year.

As discussed in Chapter 12, we propose to remove the review event for off-stream pumping costs in the Central Lockyer Valley scheme[50] for future price reviews and incorporate long-term average costs in our adjusted baseline.[51] The longer time series of historic costs makes it possible to forecast these costs with greater accuracy, with the 5-year and 10-year averages around $0.05 million per year (2023–24 dollars). We have incorporated this in the adjusted baseline for electricity costs.

Table 2 shows 2022–23 actuals with Seqwater's proposed adjustments, which we have accepted.

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[43] This reflects Seqwater's estimate of $6.9 million (Seqwater, sub. 1, pp. 27–28) less dam safety inspection costs, which Seqwater has proposed to be included as a step change in the year they are incurred.
[44] Excludes dam safety inspection costs.
[45] Adjusted for the difference between the forecast inflation from our 2020 review and actual inflation since 2018–19.
[46] Seqwater, sub. 2, p. 8; Seqwater, sub. 3, p. 10; Seqwater, sub. 4, p. 8; Seqwater, sub. 5, p. 8; Seqwater, sub. 6, p. 9; Seqwater, sub. 7, p. 8.
[47] Seqwater, sub. 1, p. 27.
[48] Seqwater, sub. 1, p. 27.
[49] Seqwater, response to RFI 29.
[50] Specifically, this review event related to pumping water into Lake Clarendon during a flow event and pumping water out of Lake Clarendon for use at a later period.
[51] We have accepted Seqwater's proposed review event adjustment for the current price path period, as set out in section 4.5.

Table 2: QCA draft position – baseline opex[a] ($ million, 2023–24 dollars)

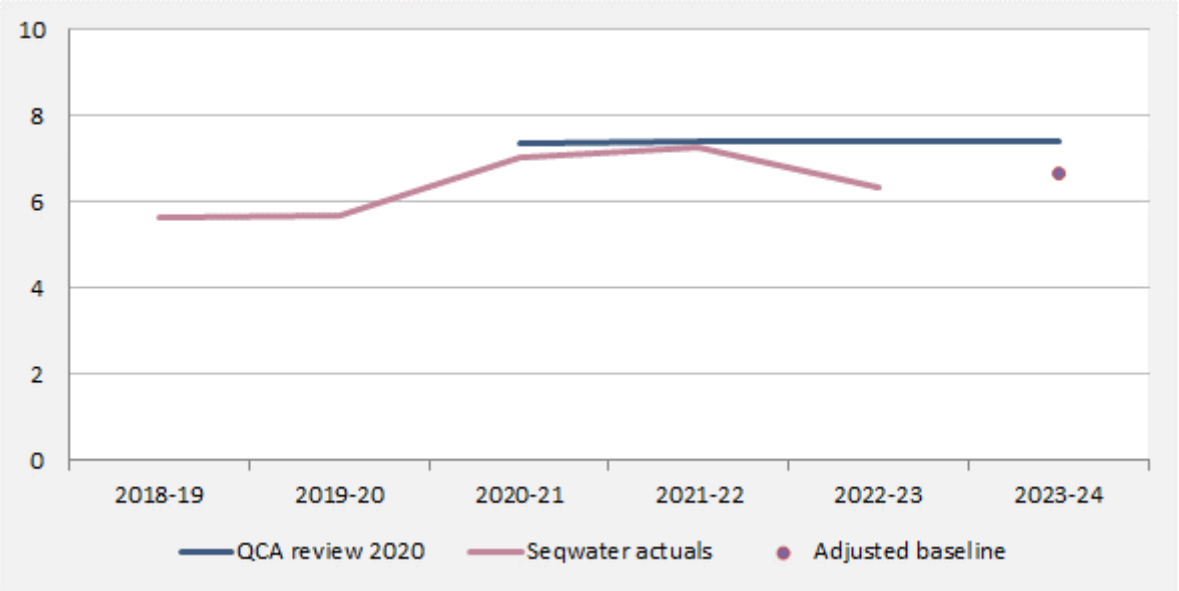
	2022–23 actuals	Seqwater adjustments	Seqwater adjusted baseline	QCA adjustments	QCA adjusted baseline
Labour	1.2	0.1	**1.3**	–	**1.3**
Electricity	0.1	–	**0.1**	–[b]	**0.1**
Repairs and maintenance	1.0	–	**1.0**	–	**1.0**
Other	0.5	–	**0.5**	–	**0.5**
Local government rates	0.9	–	**0.9**	–	**0.9**
Dam safety inspections	0.1	0.1	**0.2**	(0.2)[c]	**-**
Insurance	0.9	0.1	**1.1**	(0.1)[d]	**1.0**
Total direct[e]	**4.7**	**0.4**	**5.1**	**(0.3)**	**4.9**
Operations	1.6	–	**1.6**	–	**1.6**
Non-Infrastructure	0.1	–	**0.1**	–	**0.1**
Total non-direct[e]	**1.7**	**-**	**1.8**	**-**	**1.7**
Total opex[e]	**6.5**	**0.4**	**6.9**	**(0.3)**	**6.6**

a Includes opex allocated to irrigation and non-irrigation customers in regulated schemes. b This includes the small increase noted above for the average long-term costs for off-stream pumping costs in the Central Lockyer Valley scheme. It also includes a small reduction for Pie Creek electricity costs for an error in the pricing model identified by Seqwater. c Dam safety inspections in all schemes are treated as a step change. d We accepted Seqwater's actual 2023–24 insurance costs which resulted in a lower escalation from actual 2022–23 costs. e Totals may not add due to rounding.
Source: Seqwater pricing model 2023; Seqwater, response to RFI 8; Seqwater, response to RFI 13, QCA analysis.

4.2.2 Prudency and efficiency of baseline opex

Seqwater's actual opex has been within the recommended opex allowance from the 2020 review, adjusted for the difference between our forecast of inflation and actual inflation. Figure 5 shows that Seqwater's opex was lower in 2022–23 than the previous two years of the current price path period.

Figure 5: Total opex[a] – actuals[b] relative to QCA allowance[c] ($ million, 2022–23 dollars)



a Includes electricity costs, as these are not material and are largely fixed in Seqwater's regulated schemes. b The 2022–23 estimate of Seqwater's opex incorporates Seqwater's proposed adjustments for non-recurrent costs. c Our recommended costs from the 2020 review relate to our recommended opex for 2020–21 to 2023–24 adjusted for the difference between our forecast of inflation and actual inflation.
Source: QCA, *Rural Irrigation Price Review 2020–24, Part C: Seqwater*, final report, January 2020; Seqwater, supporting information accompanying sub. 1.

We are encouraged by Seqwater's cost savings. By resetting the baseline opex allowance down to Seqwater's actual costs, irrigators receive the benefits of Seqwater's cost savings.

We note that Seqwater's proposed lower costs are driven by lower than recommended costs in most cost categories (Table 3). The only cost category with proposed costs that are higher than our recommended costs is insurance costs, which we assess further below.

Table 3: Comparison of adjusted baseline with the 2020 review for selected cost categories ($ million, 2023–24 dollars)

	Adjusted baseline	2020 review	Difference
Labour	1.3	1.4	**(0.1)**
Electricity	0.1	0.1	-
Repairs and maintenance	1.0	1.2	**(0.2)**
Other	0.5	0.6	**(0.1)**
Local government rates	0.9	0.9	-
Insurance	1.0	0.8	**0.2**
Total direct	**4.9**	**5.0**	**(0.1)**
Operations	1.6	2.3	**(0.7)**
Non-Infrastructure	0.1	0.1	-
Total non-direct	**1.7**	**2.4**	**(0.7)**
Total operating costs	**6.6**	**7.4**	**(0.8)**

Notes: Includes opex allocated to irrigation and non-irrigation customers in regulated schemes. Our recommended costs from the 2020 review reflect our recommended opex for 2023–24 adjusted for the difference between our forecast of inflation and actual inflation. Totals may not sum due to rounding.
Source: QCA, *Rural Irrigation Price Review 2020–24, Part C: Seqwater*, final report, January 2020; Seqwater, supporting information accompanying sub. 1.

While Seqwater's adjusted baseline opex at the total regulated scheme level is lower than our recommended allowance from the 2020 review[52], there are some regulated schemes with higher than recommended opex. The two regulated schemes with materially higher opex than we recommended are the Central Lockyer Valley scheme (up 10%) and the Morton Vale Pipeline scheme (up 26%). The increase was largely driven by the increase in insurance costs.

Insurance

Seqwater's base year insurance opex is above our escalated insurance allowance from the 2020 review. Seqwater's proposed base year insurance costs are based on the 2022–23 actual costs escalated by 19.6% to give a cost of $1.1 million.[53]

In response to a request for further information, Seqwater indicated that its insurance process:

- aligned with its risk profile and risk appetite, which transfers major financial risks to the insurance market
- includes an annual renewal process to revisit its current risk profile and appetite, which informs the setting of the required limits of cover and the level of retentions (i.e. claim deductibles/excesses)
- has considered the level of self-insurance – balancing avoiding premium costs against the value for money transfer of financial risk via insurance.[54]

Seqwater's organisation-wide insurance costs were reviewed for prudency and efficiency as part of the 2022 bulk water review. In that review, we accepted Seqwater's proposed step change reflecting the material forecast increases in insurance premiums expected from 2021–22 onwards, based on estimates from Seqwater's insurance broker.[55]

We consider that Seqwater has worked closely with its broker, Marsh, to investigate the prudent scope of insurances and deductibles, and Seqwater conducts a competitive and rigorous process in selecting insurers as part of its insurance renewal strategy.[56] Given Seqwater's policies and procedures, and the cost drivers underlying its insurance costs since the 2020 review, we accept Seqwater's actual 2023–24 insurance costs as prudent and efficient.

We have made a modelling adjustment to ensure the correct application of asset valuations for the Central Lockyer scheme, which has slightly reduced base year insurance costs allocated to regulated schemes.

4.3 Step changes

4.3.1 Water accounting system

Seqwater is implementing a new water accounting system in the 2024–25 financial year. Seqwater said this system will replace the manual system that is currently used for customer water accounting as well as the uploading of billing sheets. Seqwater said its customers have requested an online portal numerous times for their water management. Seqwater proposed an opex cost component of $25,000, commencing 2024–25, for the water accounting system.[57]

[52] Adjusted for the difference between the forecast inflation from our 2020 review and actual inflation since 2020–21.
[53] Seqwater, Seqwater irrigation pricing model, November 2023, unpublished.
[54] Seqwater, response to RFI 24.
[55] QCA, *Seqwater Bulk Water Price Review 2022–26*, final report, March 2022, pp. 23, 27.
[56] Seqwater, response to RFI 17.
[57] Seqwater, sub. 1, p. 28.

We note that the drivers behind the new water accounting system are legislative compliance obligations and service improvements requested by customers. Seqwater said the costs of the system are not currently covered via its opex, and the solution that the partnership with Waterstart provides represents a low-cost solution.[58]

We accept the step change cost of $25,000 in 2024–25. We note that the use of a new system should provide a small amount of labour savings, with the removal of manual processes. Given the small opex costs of the system and the challenges in estimating the labour savings, we have not adjusted the proposed opex costs.

The capital cost component of the water accounting system is covered in Chapter 5.

4.3.2 Groundwater management: Central Lockyer

Seqwater included costs associated with the management of groundwater bores in the Central Lockyer Valley scheme. Seqwater indicated that as part of an amendment to the Moreton water plan, it has become responsible for monitoring and reporting on the groundwater conditions in Central Lockyer. Seqwater submitted a base year cost of $92,000 for 2023–24.[59]

As the management and monitoring of the groundwater bores is a new compliance obligation for Seqwater, we have accepted Seqwater's proposed step change for this expenditure.

Seqwater has also included in the Central Lockyer other new costs of $28,000 to cover the telemetry associated with the customer flow meters. These costs are a new compliance cost, and we have accepted and treated them as a step change as opposed to a base cost.

4.3.3 Dam safety inspections

Seqwater included dam safety inspections as a proposed step change. The dam safety program comprises five-yearly regulatory dam safety inspections as well as dam safety deformation surveys. As the five-year dam safety inspections are not an annual cost, Seqwater has separately treated them as a step change in the year the inspection is planned. Seqwater has proposed a total cost of $0.6 million (in 2023–24 dollars) over the price path period for the dam safety program.

As dam safety inspections are a compliance obligation for Seqwater, we have accepted Seqwater's proposed step change for this expenditure. We have adjusted for errors within Seqwater's submitted pricing model, reducing the total cost of the step change to $0.5 million (in 2023–24 dollars).

4.3.4 Regulatory fee

The apportionment of regulatory costs will generally have regard to fairly allocating the costs to the beneficiaries of the regulatory service and to the terms of the referral. Where costs cannot be linked to a particular service or user, they would generally be allocated using a fair and reasonable cost allocation methodology. In this context, we consider irrigation water access entitlements (WAEs) to be an appropriate allocator.

We note that our review is limited to pricing for irrigation customers in Seqwater's irrigation service contracts. We are undertaking this investigation to give effect to the key objectives of the government's irrigation pricing policy, including the gradual transition to a price target that

[58] Seqwater, response to RFI 23.
[59] Seqwater, sub. 1, p. 29.

excludes a return on pre-2000 assets and dam safety upgrade capex. As such, we consider that irrigation customers are the key beneficiaries of the regulatory service and should be allocated the associated costs.

We note that this allowance can only recover regulatory fees charged by us up to a cap of $3.5 million. This amount, charged in 2023–24 and 2024–25, has been smoothed over the price path period. Seqwater's share of the regulatory fee within the $3.5 million cap ($0.15 million) has been projected across the price path period in present value neutral terms using our proposed WACC.

4.4 Efficiency target

In the 2022 bulk water review, we did not apply an efficiency target to Seqwater's forecast opex as Seqwater had commenced a credible efficiency program setting out a pathway to reveal efficient costs over the regulatory period, including an ongoing process to identify and implement 'spend to save' initiatives.[60] We considered this approach to be superior to imposing an ongoing efficiency target to controllable opex.

Seqwater said that this efficiency program was now underway, and it is currently progressing the roll-out of 'spend-to-save' energy projects committed to as part of the 2022 bulk water review.[61] Seqwater said that it is also continuing to refine its broader efficiency program, including the processes of identifying and implementing efficiency opportunities across the business.

We note in section 4.3 that Seqwater's actual costs and forecast costs for this review are within the opex allowance in real terms[62] that we recommended at the 2020 review. Consistent with the 2022 bulk water review, we consider that the continued implementation of Seqwater's efficiency program is a superior approach to applying an efficiency target without a credible efficiency plan.

4.5 Review events

In accordance with the referral, we make an end-of-period adjustment to the opex allowance to reflect any increase or decrease in costs caused by the occurrence of a review event in the current price path period.[63]

Seqwater proposed to recover an increase in costs arising from two review events – an off-stream pumping cost review event and a policy change review event.[64] We have accepted Seqwater's proposal to recover:

- for the off-stream pumping cost review event, an additional $154,597 of electricity costs incurred in 2021–22 to supply the Central Lockyer Valley water supply scheme. The additional costs were incurred to pump water to the Lake Clarendon off-stream storage site during flow events and to pump the water out for later usage
- for the policy change review event, an additional $271,788 incurred in 2021–22 to supply the Cedar Pocket water supply scheme. The additional costs were incurred to meet a new requirement to engage an external engineer to undertake the 20-year inspection of the Cedar Pocket Dam. Previously, the inspections could be undertaken in-house. The new requirement

[60] QCA, *Seqwater Bulk Water Price Review 2022–26*, final report, March 2022, p. 30.
[61] Seqwater, sub. 1, p. 31.
[62] That is, after adjusting for the differences between our forecast and actual inflation since the 2020 review.
[63] Referral, para. B(1.1)(a); QCA, *Rural irrigation price review 2020–24, Part A: Overview*, final report, January 2020, p. 43.
[64] Seqwater, sub. 1, pp. 61–62.

was introduced in an update to the Dam Safety Management Guideline released in October 2020.[65]

Seqwater proposed to recover the costs over 30 years through each scheme's renewals annuity charge.[66] However, the referral requires an adjustment to the opex allowance, so we have adjusted forecast opex for each scheme to enable the costs to be recovered over the price path period.

[65] Department of Natural Resources, Mines and Energy, *Dam Safety Management Guideline*, version 2, Queensland Government, October 2020, pp. xii, 40, 50. The latest version of the guidelines (version 3) was issued in February 2024.
[66] Seqwater, sub. 1, p. 61.

5 Renewals expenditure

This chapter sets out our draft position on the prudent and efficient level of expenditure on renewing Seqwater's existing assets in regulated schemes, for the purpose of determining an appropriate allowance for renewals expenditure over the price path period. This includes metering renewals expenditure (allocated only to medium priority customers) and non-metering renewals expenditure (allocated to irrigation and non-irrigation customers) in regulated schemes.

We have considered the findings from the 2022 bulk water review, as required by the referral. In that review, we assessed Seqwater's asset planning and governance frameworks as well as the prudency and efficiency of Seqwater's capital expenditure (capex) from 1 July 2017 to 30 June 2028. Taking into account the findings of the 2022 bulk water review, we consider Seqwater's governance and procedures are appropriate.

We have adjusted the historical (section 5.2) and forecast (section 5.3) renewals program for the prudent and efficient level of metering renewal costs.

Our draft position on the prudent and efficient level of renewals expenditure is in Table 4.

Table 4: QCA draft position – renewals expenditure ($ million, nominal)

	2018-19 to 2024-25	2025-26 to 2028-29	2029-30 to 2057-58
Seqwater proposal	16.6	6.2	46.9
QCA adjustments	(1.3)	(1.2)	(1.7)
QCA draft position	**15.3**	**5.0**	**45.2**

Note: Figures in this table relate to metering renewals expenditure (allocated only to medium priority customers) and non-metering renewals expenditure (allocated to irrigation and non-irrigation customers) in regulated schemes. Totals may not sum due to rounding.
Source: Seqwater, sub. 1; QCA analysis.

5.1 Our assessment approach

Given our detailed assessment of the prudency and efficiency of Seqwater's renewals expenditure in the 2022 bulk water review, we have focused our assessment for this review on irrigation-specific expenditure that was not reviewed as part of the 2022 bulk water review.

For historical renewals expenditure, we have reviewed programs where outturn expenditure has been materially higher than the 2020 review allowance. For forecast renewals expenditure, we have reviewed a sample of material projects to test their prudency and efficiency.

In reviewing renewals expenditure, we have focused on projects and programs with a material impact on the price target at the tariff group level.

We note in Chapter 2 that the scheme-level customer reference groups (CRGs) generally endorsed Seqwater's proposed costs, with only some reservations raised on the metering spend in Logan River water supply scheme. Concerns with metering renewals expenditure were also raised at the Gatton workshop in January 2024.[67] Given the materiality of metering renewals expenditure on the price target at the tariff group level, we engaged AtkinsRéalis to assist in assessing the prudency

[67] Gatton workshop summary at QCA, *Irrigation price investigation 2025–29*, QCA website.

and efficiency of the metering renewals program for schemes with material metering renewals expenditure.

5.2 Historical renewals expenditure

Seqwater said that it had overspent the recommended allowance from the 2020 review by $5.7 million (Table 5).[68]

Table 5: Seqwater's actual renewals, 2018–19 to 2024–25 ($ million, nominal)

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24 (est.)	2024–25 (forecast)	Total
QCA 2020 review	2.9	2.3	2.0	1.3	0.8	0.5	1.1	**10.9**
Seqwater actual/budget	2.0	3.4	3.7	2.0	2.8	0.9	1.8	**16.6**
Difference	**(1.0)**	**1.1**	**1.7**	**0.6**	**2.1**	**0.5**	**0.7**	**5.7**

Notes: We examine actual renewals for the 7-year period in this table to allow the annuity balance for each scheme to be rolled forward from 1 July 2018 to 30 June 2025. Figures in this table relate to renewals allocated to irrigation and non-irrigation customers in regulated schemes. Totals may not sum due to rounding.
Source: QCA, *Rural irrigation price review 2020–24, Part C: Seqwater*, final report, January 2020; QCA analysis.

The overspend was largely driven by metering renewal expenditure, which increased by $4.4 million (or 100%) relative to the 2020 review allowance. Non-metering renewals increased by $1.3 million (or 19%) relative to the 2020 review allowance.

During the period, Seqwater also spent $0.6 million in capex for the design, development and implementation of a water accounting system.[69]

Given the material overspend in the metering renewal program, we reviewed projects in this program for prudency and efficiency (section 5.2.1).[70] We also assessed the prudency and efficiency of the water accounting system included in the non-metering renewals program (section 5.2.2).

Table 6 shows our draft position for the prudent and efficient level of historical renewals.

Table 6: QCA draft position for historical renewals[a] ($ million, nominal)

	2018-19	2019-20	2020-21	2021-22[b]	2022-23	2023-24[c]	2024-25[c]	Total[d]
Seqwater proposed	2.0	3.4	3.7	2.0	2.8	0.9	1.8	16.6
QCA adjustments	–	–	–	(0.4)	–	(0.2)	(0.7)	(1.3)
QCA draft position[c]	**2.0**	**3.4**	**3.7**	**1.5**	**2.8**	**0.8**	**1.1**	**15.3**

a Figures in this table relate to renewals allocated to irrigation and non-irrigation customers in regulated schemes. b Our adjustment for 2021–22 is the removal of review events (as we have recovered these through opex – see section 4.5). c Our assessment for 2023–24 (projected) and 2024-25 (forecast) is discussed as part of the assessment of the future metering renewals (section 5.3). d Totals may not sum due to rounding.
Source: Seqwater, supporting information accompanying sub. 1; QCA analysis.

[68] Seqwater, sub. 1, p. 38.
[69] Seqwater, sub. 1, p. 38.
[70] We note also that metering renewals expenditure comprises $8.9 million of the total $16.6 million program. In addition, metering renewals expenditure is allocated 100% to medium priority (mainly irrigation customers), while only a portion of non-metering renewals expenditure is allocated to medium priority using the headworks utilisation factor (for bulk schemes) or WAE (for distribution systems).

5.2.1 Metering renewal program

Central Lockyer Valley, Logan River, Mary Valley and Warrill Valley incurred $8.7 million of the $8.9 million in metering expenditure over the period from 2018–19 to 2024–25, compared to our metering expenditure allowance of $1.0 million over this period.

In general, AtkinsRéalis found the metering renewal program to be prudent as it is driven by the need for legislative compliance with the National Measurement Institute (NMI) Standard NMI M10.[71] In order to achieve compliance with this standard, Seqwater needs to install and validate pattern meters on a five-yearly basis.[72] Further, Schedule 11 of the Water Regulation 2016 stipulates a due date by which meters that do not meet specified validation requirements must be replaced.

AtkinsRéalis considered that Seqwater's general approach to the delivery of metering renewals projects, including project management, engineering, piping and installation is appropriate and in line standard industry practice.[73] However, while AtkinsRéalis found that Seqwater's choice of preferred supplier, Krohne, was in accordance with Seqwater's procurement procedures, AtkinsRéalis stated that Seqwater had not provided sufficient information to support the contention that Krohne meters are the only meters compliant with the NMI M10 standard.[74]

The AtkinsRéalis review of the cost of the program identified an average cost per meter of around $11,000 (Table 7).

Table 7: Historical metering renewal expenditure ($ million, 2023–24 dollars)

Scheme	Number of meters	Cost	Cost per meter ($'000)
Central Lockyer Valley	345	4.1	12
Logan River	51	0.8	16
Lower Lockyer Valley	10	0.1	9
Mary Valley	169	0.5	3
Pie Creek	44	0.1	1
Warrill Valley	145	2.5	16
Total	**764**	**8.1**	**11**

Notes: Figures in this table are fully allocated to medium priority (including irrigation) customers in regulated schemes. Totals may not sum due to rounding.
Source: AtkinsRéalis, *Seqwater meter renewals expenditure review*, supplementary report, June 2024, p. 12.

We consider that the overall unit cost is broadly similar to unit metering costs for Sunwater's regulated schemes.

As Seqwater's historical metering renewals program has an appropriate driver, and as we have not identified any inefficiency in cost, we have assessed the program as prudent and efficient (Table 8).

AtkinsRéalis did recommend adjustments for inefficient costs for metering renewals that were assessed as part of multi-year metering renewal program that occurred through both the projected renewals (2023–24 and 2024–25) and future renewals (Table 11). We discuss these adjustments in section 5.3.2.

[71] AtkinsRéalis, *Seqwater meter renewals expenditure review,* supplementary report, June 2024, p. 10.
[72] AtkinsRéalis, *Seqwater meter renewals expenditure review,* supplementary report, June 2024, p. 10.
[73] AtkinsRéalis, *Seqwater meter renewals expenditure review*, supplementary report, June 2024, p. 11.
[74] AtkinsRéalis, *Seqwater meter renewals expenditure review*, supplementary report, June 2024, p. 11.

Table 8: QCA draft position for historical metering renewals ($ million, nominal)

	2018–19	2019–20	2020–21	2021–22	2022–23	2023–24	2024–25	Total
Seqwater proposal	1.0	2.3	1.8	0.5	1.6	0.4	1.4	**8.9**
QCA adjustments	–	–	–	–	–	(0.2)	(0.7)	**(0.9)**
QCA draft position	**1.0**	**2.3**	**1.8**	**0.5**	**1.6**	**0.2**	**0.6**	**8.0**

Notes: Figures in this table are fully allocated to medium priority (including irrigation) customers in regulated schemes. Totals may not sum due to rounding.
Source: Seqwater, sub. 1; QCA analysis.

5.2.2 Water accounting system

Late in the 2020 review, Seqwater provided a business case for a customer billing and water accounting system with proposed capex of $0.7 million. Given the late stage of the submission, we excluded these costs as we were unable to undertake a detailed assessment of the efficiency of the costs.[75]

Seqwater submitted net capex of $0.6 million[76] for the design, development and implementation of a water accounting system over 2021–22 to 2023–24.[77] Seqwater said that it delivered the water accounting system in response to customers expressing on numerous occasions (through the engagement program) that they would like an online portal where they can manage their water allocations, enter meter reads and monitor usage and remaining balances.[78]

Seqwater also said that the costs are lower than other water accounting systems through the use of a pilot partnership with Waterstart.[79] Seqwater proposed allocating these build costs in the annuity balance of each regulated scheme based on customer numbers.

We reviewed information from Seqwater on the business case and the procurement of the water accounting system.[80] We accept that the costs of the water accounting system are both prudent and efficient. We also note that there is broad customer acceptance for the new water accounting system, with all the scheme-level customer reference groups endorsing the proposed costs in Seqwater's pricing proposal.[81] Seqwater has developed the water accounting system in pilot partnership with Waterstart resulting in a lower cost to irrigators.

We have reviewed and accepted the costs of the water accounting system, with a total of $0.5 million allocated to regulated schemes after removing the share allocated to the Central Brisbane River scheme.[82]

We note that Seqwater's proposed treatment of these system build costs is inconsistent with its classification and allocation of other non-infrastructure costs, which are normally treated as indirect costs and allocated across the business using direct opex. We also would not generally allocate costs such as this system (which is primarily service- rather than asset-related) between high priority and medium priority customers in bulk schemes using the headworks utilisation factor.[83] However,

[75] QCA, *Rural irrigation price review 2020–24, Part C: Seqwater*, final report, January 2020, p. 19.
[76] This includes the reduction in the total cost of $0.7 million by $0.1 million sourced from a Waterstart innovation grant. See Seqwater, *Logan River WSS, Customer Reference Group – meeting summary*, 12 September 2023, p. 2.
[77] Seqwater, sub. 1, p. 38.
[78] Seqwater, sub. 1, p. 38.
[79] Seqwater, sub. 1, p. 38.
[80] Seqwater, response to RFI 23.
[81] Seqwater, sub. 1, p. 7.
[82] Seqwater, response to RFI 27.
[83] This results in only around half of the proposed $0.5 million being allocated to irrigation tariff groups.

given the broad customer acceptance of Seqwater's approach to recovering this cost, and also considering the immateriality of this cost, we have accepted Seqwater's proposed treatment.

5.2.3 Review events

Seqwater proposed to recover an increase in costs arising from two review events – an off-stream pumping cost review event and a policy change review event – within the relevant scheme's renewals annuity allowance.[84] However, the referral requires an adjustment to the opex allowance, so we have adjusted forecast opex for each scheme to enable the costs to be recovered over the price path period (see section 4.5).

5.3 Forecast renewals expenditure

Our draft position is that the prudent and efficient level of forecast renewals expenditure is $50.2 million (Table 9).

Table 9: QCA draft position for forecast renewals ($ million, nominal)

	2025–26	2026–27	2027–28	2028–29	2029–58	Total
Seqwater proposal	0.8	1.9	1.7	1.9	46.9	**53.1**
QCA adjustments	(0.4)	(0.5)	(0.1)	(0.2)	(1.7)	**(2.9)**
QCA draft position	**0.3**	**1.3**	**1.6**	**1.7**	**45.2**	**50.2**

Notes: Figures in this table relate to renewals allocated to irrigation and non-irrigation customers in regulated schemes. Totals may not sum due to rounding.
Source: Seqwater, sub. 1; QCA analysis.

We have adjusted the metering renewals program to reflect the prudent and efficient level of expenditure (section 5.3.1) and accepted the non-metering renewals program as prudent and efficient (section 5.3.2 and 5.3.3).

5.3.1 Metering renewals expenditure

Seqwater submitted a forecast metering renewal program, for the price path period and beyond, of $3.7 million (Table 10).

Table 10: Seqwater's forecast metering renewal program by scheme ($ million, nominal)

Scheme	2025–26 to 2028–29	2029-30 to 2057–58	Total
Morton Vale Pipeline	0.7	–	**0.7**
Logan River	0.1	–	**0.1**
Lower Lockyer	0.3	1.8	**2.1**
Mary Valley	0.5	–	**0.5**
Warrill Valley	0.2	–	**0.2**
Total	**1.9**	**1.8**	**3.7**

Note: This renewals expenditure is fully allocated to medium priority (including irrigation) customers in regulated schemes. Seqwater did not forecast any metering renewals expenditure beyond 2029–30. Source: Seqwater, sub. 1; Seqwater, response to RFI 39.

[84] Seqwater, sub. 1, pp. 61–62.

With the assistance of AtkinsRéalis, we assessed the program for prudency and efficiency (Table 11). This assessment also covered projected expenditure over 2023–24 and 2024–25 in Logan River ($1.1 million) and Mary Valley ($0.6 million).

Table 11: Assessment of Seqwater's forecast metering renewals program

Scheme	AtkinsRéalis findings	QCA assessment
Morton Vale Pipeline	AtkinsRéalis assessed the project to be prudent given it is driven by legislative requirements but noted that Seqwater had not provided it with requested information such as the number of meters to be replaced or robust supporting documentation. On the assumption that 25% of meters in Seqwater's meter register for this scheme would be replaced over the price path and using historical data on Seqwater's average cost per meter, AtkinsRéalis recommended an adjustment of $0.5 million to the program.	We consider the project is prudent given the legislative driver for the project. However, in the absence of details such as the number of meters to be replaced or robust supporting documentation, we have accepted the AtkinsRéalis assumed replacement rate and average installation cost per meter.
Logan River	AtkinsRéalis noted that, in addition to legislative requirements, the renewal program in this scheme is driven by ageing meters, inaccurate meter readings, safety concerns and meter disrepair from a long dry spell. While AtkinsRéalis accepted the number of meters to be replaced based on the detailed business case provided, it said that Seqwater had not justified the significant increase in cost per meter as compared to the historical program.	We consider the number of meters to be installed is appropriate given the detailed business case for the project. However, we have applied Seqwater's historical average replacement cost per meter given the lack of information to support the step change increase in unit costs proposed by Seqwater.
Lower Lockyer	AtkinsRéalis assessed the project to be prudent given it is driven by legislative requirements but noted that Seqwater had not provided it with requested information such as the number of meters to be replaced or a business case. On the assumption that 25% of meters in Seqwater's meter register for this scheme would be replaced over the price path and using historical data on Seqwater's average cost per meter, AtkinsRéalis recommended an adjustment of $1.4 million to the program.	We consider the project is prudent given the legislative driver for the project. However, in the absence of details such as the number of meters to be replaced or robust supporting documentation, we have accepted the AtkinsRéalis assumed replacement rate and average installation cost per meter.
Mary Valley	AtkinsRéalis noted that in addition to legislative requirements, the renewal program in this scheme is driven by ageing meters, inaccurate meter readings, safety concerns and meter disrepair from a long dry spell. While AtkinsRéalis accepted the number of meters to be replaced based on the detailed business case provided, it said that Seqwater had not justified the significant increase in cost per meter as compared to the historical program.	We consider the number of meters to be installed is appropriate given the detailed business case for the project. However, we have applied Seqwater's historical average replacement cost per meter given the lack of information to support the step change increase in unit costs proposed by Seqwater.

Source: AtkinsRéalis, *Seqwater meter renewals expenditure review*, supplementary report, June 2024, pp. 20–40.

AtkinsRéalis also recommended excluding the proposed metering renewals expenditure for the Warrill Valley scheme given the relatively low expenditure and the lack of supporting

documentation.[85] However, we have not applied this recommended adjustment due to its lack of materiality at the price target level.

Table 12 shows our proposed adjustments to Seqwater's proposed metering renewals expenditure.

Table 12: QCA draft position for forecast metering renewals ($ million, nominal)

	2025-26	2026-27	2027-28	2028-29	2029-30 to 2032-33	Total
Seqwater proposal	0.7	0.8	0.2	0.2	1.8	**3.7**
QCA adjustments	(0.4)	(0.5)	(0.1)	(0.2)	(1.4)	**(2.6)**
QCA draft position	**0.3**	**0.3**	**0.1**	**-**	**0.3**	**1.0**

Notes: Figures in this table are fully allocated to medium priority (including irrigation) customers in regulated schemes. Totals may not sum due to rounding.
Source: Seqwater, sub. 1; QCA analysis.

5.3.2 Non-metering renewals expenditure over the price path period

For the period 2022–23 to 2027–28, we have accepted Seqwater's proposed capex allowance as a reasonable estimate of prudent and efficient capex as part of the bulk review.[86] The referral for the irrigation review requires us to take into account these findings as part of the irrigation review.

We have accepted Seqwater's proposed non-metering renewals over the price path period.

5.3.3 Non-metering renewals expenditure beyond the price path period

For this review, Seqwater has changed its approach to forecasting long-term renewals beyond the price path period. In previous reviews, Seqwater developed these forecasts using an asset renewals model that was based on asset age renewal.[87] However, Seqwater said that this model has not been updated significantly since it was initially developed in 2014, and its integrated asset management plans only develop asset renewals for the next 10 years ahead.[88]

In the absence of a modelling approach, Seqwater has proposed applying an asset-specific percentage of the written-down value of assets to estimate an annual renewals forecast for the remaining years in the 30-year planning period (i.e. 2033–34 to 2057–58).[89]

Seqwater said that while there is no industry specific guidance for a bulk water supply business, it had taken the level of complexity and the maintained state of assets into account in determining the annual asset-specific renewal rate.[90]

We have assessed the impact of this new approach by comparing the renewals expenditure profile from the 2020 review with the current review, from 2029–30 until 2053–54 (Table 13).

[85] AtkinsRéalis, *Seqwater meter renewals expenditure review*, supplementary report, June 2024, pp. 39–40.
[86] QCA, *Seqwater Bulk Water Price Review 2022–26*, final report, March 2022, p. 54.
[87] Seqwater, response to RFI 7.
[88] Seqwater, response to RFI 7.
[89] Seqwater, response to RFI 12.
[90] Seqwater, response to RFI 7.

Table 13: Seqwater proposed expenditure for non-metering renewals ($ million, 2023–24 dollars)

	2029–30 to 2038–39	2039–40 to 2048–49	2049–50 to 2053–54	Total
2020 review	3.7	22.7	22.6	**49.1**
Current review	6.9	9.9	5.0	**21.8**
Difference	**3.2**	**(12.8)**	**(17.7)**	**(27.3)**

Note: Figures in this table relate to renewals allocated to irrigation and non-irrigation customers in regulated schemes. Our calculation of the renewals annuity allowance in the 2020 review only required renewals expenditure until 2053–54, so we have limited our comparison up to this year. We have adjusted the 2020 review figures for the difference between our forecast and actual inflation from 2018–19.
Source: Seqwater, sub. 1; QCA, *Rural irrigation price review 2020–24, Part C: Seqwater*, final report, January 2020; QCA analysis.

We note that the 2020 review included forecasts of large lumpy renewals in 2044–45 (for Mary Valley) and 2050–51 (for Lower Lockyer) whereas the asset-specific renewal rate results in a smoother renewals profile in these years.

When the 2020 review renewals profile is adjusted for the lumpy expenditure forecast for these years, this results in a similar profile as the new approach.

Table 14: Seqwater's proposed expenditure for renewals excluding lumpy capex years (non-metering only) ($ million, 2023–24 dollars)

	2029–30 to 2038–39	2039–40 to 2048–49	2049–50 to 2053–54	Total
2020 review	3.7	10.4	7.4	**21.5**
Current review	6.9	9.9	5.0	**21.8**
Difference	**(3.2)**	**0.5**	**2.4**	**0.3**

Note: Figures in this table relate to renewals allocated to irrigation and non-irrigation customers in regulated schemes. Our calculation of the renewals annuity allowance in the 2020 review only required renewals expenditure until 2053–54, so we have limited our comparison up to this year. We have adjusted the 2020 review figures for the difference between our forecast and actual inflation from 2018–19.
Source: Seqwater, sub. 1; QCA, *Rural irrigation price review 2020–24, Part C: Seqwater*, final report, January 2020; QCA analysis.

The new forecasting approach used by Seqwater means that large capex projects will only come into the annuity profile when they are 10 years out. This should result in a more accurate forecast of the project costs over this period; but it also means that large and distant future renewals will be excluded from price targets.

We note that the new approach results in a similar renewals expenditure profile over the planning period. Further, we consider it is appropriate to exclude large and distant forecasts from price targets (given the uncertainty associated with the expenditure estimates) and adjust the renewals annuity balance as more accurate forecasts become available.

For these reasons, and given Seqwater's non-metering renewals expenditure was endorsed by CRGs, we have accepted the renewals expenditure proposed by Seqwater.

6 Inflation and the rate of return

We have reviewed the appropriateness of Seqwater's approaches to estimating forecast inflation and setting the weighted average cost of capital (WACC), taking into account the consistency of Seqwater's approach with our established methodologies. In accordance with the referral,[91] we are required to consider the findings from the Seqwater bulk water price review 2022–26[92], where relevant.

6.1 Estimating annual forecast inflation

Seqwater proposed to forecast inflation across the different uses using a broadly similar approach as our 2021 inflation forecasting position paper (the 2021 inflation report).[93]

Seqwater's proposal used short-term Reserve Bank of Australia (RBA) forecasts of consumer price index (CPI) inflation for 2023–24 and 2024–25, and then derived annual forecasts using a linear glide path from a forecast of 3.0% in 2025–26 to a rules–based anchor–point forecast of 2.5% in 2028–29.[94] Seqwater used the midpoint of the RBA's target range (2.5%) as the forecast for 2029–30 onwards.

While Seqwater's proposal is consistent with our approach, we have updated Seqwater's annual forecast CPI inflation using the latest RBA data.[95]

Table 15 compares the inflation forecasts in Seqwater's proposal with our updated forecasts.

Table 15: QCA's draft position on CPI inflation forecasts (%)

	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
Seqwater's proposal	3.50	3.00	3.00	2.83	2.67	2.50
QCA draft position	3.80	3.20	2.60	2.57	2.53	2.50

Source: Seqwater, sub. 1, pp. 30–31; RBA, *Statement on Monetary Policy*, May 2024, p. 51; QCA analysis.

6.2 Applying forecast inflation

Seqwater's proposal applies forecast inflation in the following calculations:

- Indexing the annuity in calculating prices under the existing renewals annuity approach.
- Escalating baseline opex and step changes over the price path period with input–specific inflation measure.
- Smoothing unit costs to derive price targets and draft prices over the price path period for each tariff group.

We have assessed Seqwater's proposed inflation measure for each of these purposes.

[91] Referral, para. C(1.1)(d)
[92] QCA, *Seqwater Bulk Water Price review 2022–26*, final report, March 2022.
[93] QCA, *Inflation forecasting*, final position paper, October 2021.
[94] We note that based on Seqwater's forecasts at the time, the rules-based anchor point forecast should have been 2.75%, consistent with our approach in the 2021 inflation report. However, based on the current annual CPI forecasts, a 2.5% rules-based anchor-point forecast is appropriate.
[95] RBA, *Statement on Monetary Policy*, May 2024, p. 51.

6.2.1 Renewals expenditure allowance

In the 2020 review,[96] we recommended that Seqwater transitions to a regulatory asset base (RAB) approach to recover its renewals expenditure. However, Seqwater has chosen to maintain the existing renewals annuity approach for the current price path in the interest of certainty and predictability. Stakeholders did not raise concerns regarding the current annuity approach; nor did they indicate any interest in moving towards a RAB-based approach.[97]

We have accepted Seqwater's proposed inflation measures for the renewals expenditure allowance under the annuity approach, subject to updating them for the latest annual CPI inflation forecast data (Table 16).

Table 16: QCA's draft position on inflation measure (%)

Use	Basis for inflation factor	Seqwater proposal	QCA draft
Renewals expenditure allowance			
Annuity approach	Geometric mean of the annual CPI inflation forecasts over a 10-year period for consistency with the 2021 inflation report	2.60	2.52

Source: Seqwater pricing model 2023; QCA analysis.

6.2.2 Escalation of opex

Seqwater presented its proposed baseline opex in 2023–24 dollars by escalating 2022–23 non-labour costs by the following factors:

- For insurance costs, the escalation factor was based on the estimated increase in actuals for 2023–24, which were expected to be 19.6% higher than 2022–23.[98]
- For local government rates, costs were escalated by 2.5%.[99]
- For all other cost categories, costs were escalated by the RBA's forecast CPI inflation of 3.5%.[100]

For cost categories other than insurance costs, we have updated the forecast CPI inflation for 2023–24 to 3.8%.

Employee and contract labour expenses

Seqwater's proposed approach to employee and contract labour expenses uses:

- the Queensland Treasury wage price index (WPI) forecast of 2.75% applied for 2024–25
- a 10-year historical average of the Australian Bureau of Statistics (ABS) WPI for Queensland of 2.36% applied in years 2025–26 to 2028–29.[101]

Seqwater's approach is generally consistent with our approach in the 2022 bulk water review and the 2021 inflation report. However, Seqwater used the exact rates from the 2022 bulk water review to escalate employee and contract labour expenses instead of using current estimates.

[96] QCA, *Rural irrigation price review 2020-24, Part C: Seqwater*, final report, January 2020, p. 22.
[97] Seqwater, sub. 1, p. 41.
[98] This was revised downwards to 16.5% by Seqwater based on actual 2023–24 insurance costs (Seqwater, response to RFI 8).
[99] In response to our query on this escalation rate, Seqwater clarified that this cost category should have also increased by the RBA's forecast CPI inflation consistent with cost categories other than insurance (Seqwater, response to RFI 9).
[100] Seqwater, Seqwater irrigation pricing model, November 2023, unpublished. RBA, *Statement on Monetary Policy*, August 2023, p. 66.
[101] Seqwater, sub. 1, p. 31; Seqwater, Irrigation pricing model, November 2023.

Consequently, we have updated the escalation forecasts using the latest State Budget WPI forecasts of 3.50% for 2024–25 to 2026–27.[102] Our final report will update this using the latest Queensland Treasury forecasts.

We note that Seqwater used its 2023–24 corporate budget for labour expenditure in 2023–24 and not its actual expenditure. Therefore, no escalation rate is provided for that year.

We have also updated our assessment of the long-term historical Queensland WPI with the inclusion of recent actuals, resulting in a rate of 2.49% for the remaining period, consistent with our stated approach in the 2021 inflation report.

Table 17: QCA's draft position on labour cost escalation rates (%)

	2024-25	2025-26	2026-27	2027-28	2028-29
Seqwater's proposal	2.75	2.36	2.36	2.36	2.36
QCA draft position	3.50	3.50	3.50	2.49	2.49

Source: Seqwater, sub. 1, p. 31; Seqwater pricing model 2023; QCA analysis.

Repair and maintenance

Seqwater has proposed a 56:44 weighting of employee expenses and annual CPI inflation for escalating repair and maintenance costs, consistent with the approach we accepted in the 2020 review. We reviewed Seqwater's current repair and maintenance costs and determined that 56% remains a reasonable estimate for the proportion of employee and contract labour expenses in these costs. However, we have updated the figures to reflect the escalation rates for employee and contract labour expenses, as well as annual CPI inflation forecasts discussed above.

Table 18: QCA's draft position on repair and maintenance cost escalation rates (%)

	2024-25	2025-26	2026-27	2027-28	2028-29
Seqwater's proposal	2.86	2.64	2.57	2.49	2.42
QCA draft position	3.37	3.10	3.09	2.51	2.49

Source: Seqwater, sub. 1, p. 31; Seqwater pricing model 2023; QCA analysis.

Electricity

Seqwater proposed to escalate electricity by averaging its long-term contracted rates, consistent with the approach we accepted in the 2022 bulk water review. Seqwater's proposed escalation rate for electricity costs is marginally lower than our inflation forecast over the price path period. We find this reasonable and therefore we have accepted the proposed approach.

Table 19: QCA's draft position on electricity escalation rates (%)

	2024-25	2025-26	2026-27	2027-28	2028-29
Seqwater's proposal	2.30	2.30	2.30	2.30	2.30
QCA draft position	Accepted with no adjustment				

Source: Seqwater, sub. 1, p. 31; QCA analysis.

[102] Queensland Government, *Queensland Budget Update 2023-24*, December 2023, p. 8; Queensland Government, *Budget Strategy and Outlook – Queensland Budget 2023-24*, Budget Paper no. 2, June 2023, p. 4.

Other materials and services

Seqwater proposed to escalate other materials and services using annual CPI inflation forecasts, consistent with our approach in the 2022–26 bulk water price review and the 2021 inflation report. We have accepted the approach; however, we have updated the forecasts of annual CPI inflation to the latest data (Table 15).

Insurance

Seqwater's proposed approach to forecasting insurance involves applying global projections provided by Marsh, its broker, and Seqwater-specific insights from its direct account manager at Marsh for the period of 2024–25 to 2028–29, leading to a forecast of a 5% increase in premiums.[103]

Since Seqwater made its proposal, we have been provided with the actual premiums for 2023–24, resulting in a total increase of 16.50%,[104] which we have accepted.

Marsh's latest global market insurance index update[105] indicates a further slowdown in the rate of premium increases. Specifically, the changes in Pacific property insurance premium rates have dropped to zero in the first quarter of 2023–24 from 2% in the third quarter of 2022–23 (the time of Seqwater's proposal), while Pacific casualty rate changes have dropped to 3% from 5% in the third quarter of 2022–23.

However, considering the Seqwater-specific insights provided by Seqwater's direct account manager at Marsh, we find it reasonable to apply the proposed 5% premium increase for the remaining years of the price path. Additionally, Seqwater has chosen to bear the risk of higher insurance forecasts, as it did not request a review event adjustment for insurance costs exceeding the allowed insurance costs in the current price path period and has not proposed a review event for insurance costs in the upcoming price path.

We will review the actual escalation rate of 2024–25 and any updated advice by Marsh for the final report.

Table 20: QCA draft position on insurance escalation rates (%)

	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
Seqwater's proposal	19.60	5.00	5.00	5.00	5.00	5.00
QCA draft position	16.50	5.00	5.00	5.00	5.00	5.00

Source: Seqwater, sub. 1, p. 31; Seqwater, response to RFIs 8, 17 and 24; QCA analysis.

6.2.3 Smoothing unit costs

Seqwater has proposed using a geometric mean of the annual CPI inflation forecasts over the four-year price path period to smooth unit costs, consistent with the 2021 inflation report.

We have accepted this measure; however, we have updated the annual CPI inflation forecasts with the latest data (Table 15).

[103] Seqwater, response to RFIs 8, 17 and 24.
[104] Seqwater, response to RFI 8.
[105] Marsh, *Global Insurance Market Index Q1 2024*, Marsh website, accessed April 2024.

6.3 Weighted average cost of capital

The weighted average cost of capital (WACC), or rate of return, is an estimate of the rate of return on investment that compensates the benchmark efficient firm for the regulatory and commercial risks associated with providing access to the service. For this review, the WACC is used in the building block methodology as an input to assess total costs. Seqwater proposed a post-tax nominal WACC of 6.53%.[106]

Table 21: Seqwater's proposed WACC parameters

Parameter	Seqwater's proposal
Risk-free rate	4.09%
Market risk premium	6.5%
Equity beta	0.755
Cost of equity	9.00%
Credit rating	BBB
Debt raising costs	0.1%
Cost of debt	4.89%
Capital structure	60% debt
Gamma	0.484
Nominal post-tax WACC	**6.53%**

Source: Seqwater sub. 1, pp. 43–44.

6.3.1 General assessment approach

In assessing Seqwater's proposed WACC, we have considered the overarching commercial and regulatory risks Seqwater faces. Subsequently we have reviewed Seqwater's key WACC parameters against the methods presented in our report on approaches to determining reasonable rates of returns (2024 rate of return report).[107] We also conducted a normalisation exercise, comparing Seqwater's WACC proposal against other regulatory decisions for other relevant businesses.

While certain time-varying WACC parameters will need to be updated as part of the final report, our view is that Seqwater's proposed WACC is reasonable and provides a return on investment commensurate with the regulatory and commercial risks involved.

6.3.2 Analysis of WACC parameters

Beta

Seqwater proposed an equity beta of 0.755. Seqwater said that is the same as the approved equity beta in the 2020 review and is consistent with the equity beta applied in the recent Seqwater bulk review.[108]

As part of the 2020 review, we considered that an equity beta of 0.755 was reasonable. Furthermore, we note that Seqwater's systematic risk profile has not markedly changed since the last

[106] Seqwater, sub. 1, p. 45.
[107] QCA, *Rate of return review*, final report, version 3, February 2024.
[108] Seqwater, sub. 1, p. 44.

review, given the lack of growth options available to Seqwater, and its relatively stable customer base.

As a cross-check, we have investigated the asset betas of relevant international regulated energy and water businesses. This sample of businesses had a median asset beta of 0.38 and an average asset beta of 0.39. Assuming a 60% level of gearing, this equates to an equity beta of approximately 0.8 using the Myers-Brealey formula to re-lever.

Based on the above information, we find Seqwater's proposed beta is reasonable.

Risk-free rate

Seqwater proposed a risk-free rate of 4.09% using 10-year Australian Government nominal bond yields and a 40-day averaging period to 18 October 2023.[109]

We note that Seqwater's proposed risk-free rate has been calculated using unannualised bond yields. After annualising these bond yields over the same 40-day averaging period to 18 October 2023, we calculated a risk-free rate of 4.13%. To generate draft prices, we have substituted Seqwater's estimate of the risk-free rate with our own, recognising that this reflects the methodology Seqwater was attempting to replicate.

This risk-free rate estimate is preliminary in nature and will be updated ahead of the final report based on Seqwater's nominated averaging period. Seqwater indicated to us that its preference was for the risk-free rate to be calculated using the latest possible 60 business days.[110] Given that our final report is due to the government by the end of January 2025, our view is that an averaging period ending in November 2024 would represent the latest possible averaging period before we finalise our report. Therefore, as part of the final decision we propose to use the 60 business days to the end of November 2024 to calculate the risk-free rate.

Market risk premium

Seqwater submitted a market risk premium (MRP) of 6.5% based on our estimate of the MRP in the 2022–26 Seqwater bulk review, which incorporated the findings of our rate of return review. Seqwater also noted this this proposed value was the same as our recommended estimate for the 2020 irrigation review.[111]

As set out in the 2024 rate of return review report, we consider that it is reasonable to estimate the MRP using the Ibbotson approach. Our estimate of the MRP using the Ibbotson approach, updated to include data from 2024, is 6.3%.

Credit rating

Seqwater proposed a credit rating of BBB.[112] Our view is that Seqwater's risk profile has not changed materially since our last review, when we assigned Seqwater a BBB credit rating. As such, we consider that a BBB credit rating should continue to be used.

[109] Seqwater, sub. 1, pp. 43–44.
[110] Seqwater, response to RFI 45.
[111] Seqwater, sub. 1, p. 44.
[112] Whilst Seqwater did not explicitly propose a BBB credit rating, its cost of debt calculations have assumed the use of a BBB credit rating.

Cost of debt

Seqwater has proposed a cost of debt of 4.89% based on a trailing average cost of debt of 4.79% and debt raising costs of 0.1%. Seqwater's proposed trailing average comprised nine yearly debt estimates spanning from April 2013 to March 2023 and a tenth partial year estimate from April 2023 to September 2023.[113]

Seqwater's cost of debt calculation is consistent with our approach to calculating the cost of debt for a BBB credit rating business. However, since Seqwater made its proposal, there has been a change to the data source underlying Seqwater's proposed cost of debt. Specifically, the RBA no longer publishes spread to swap data, which has been used to extrapolate the cost of debt to an effective 10-year term. The 2024 rate of return report now details our new approach to extrapolate the cost of debt to achieve an effective 10-year term.

Similar to the risk-free rate, Seqwater's cost of debt estimate is preliminary in nature and will be updated ahead of the final report based on Seqwater's nominated averaging period. Given timing constraints, we propose using data up to November 2024 to estimate Seqwater's cost of debt as part of our final decision.

As this is the first time a trailing average cost of debt has applied to Seqwater, we consider it reasonable to calculate the trailing average cost of debt in the final decision using 10 yearly cost of debt estimates that each use a 12-month averaging period to November of the respective year. In this fashion, Seqwater's trailing average cost of debt involves using data stretching from December 2014 to November 2024.

While a mechanism does not exist within this review to allow for annual updates of the cost of debt within the upcoming price path period, a true-up of the trailing average cost of debt could be incorporated as part of the ex post review at the next irrigation price review.

Gearing

Seqwater proposed a gearing level of 60% debt. Seqwater noted that this was the value that applied in the 2020 review.[114]

Our view is that gearing set at 60% debt is appropriate. In coming to this view, we consider that target levels of gearing are unlikely to change much over time, and Seqwater's proposed gearing is in line with other potentially similar water businesses.

Gamma

Seqwater proposed a gamma of 0.484.[115] This is consistent with our estimate of gamma in the 2024 rate of return report.

6.3.3 Normalisation and top-down assessment

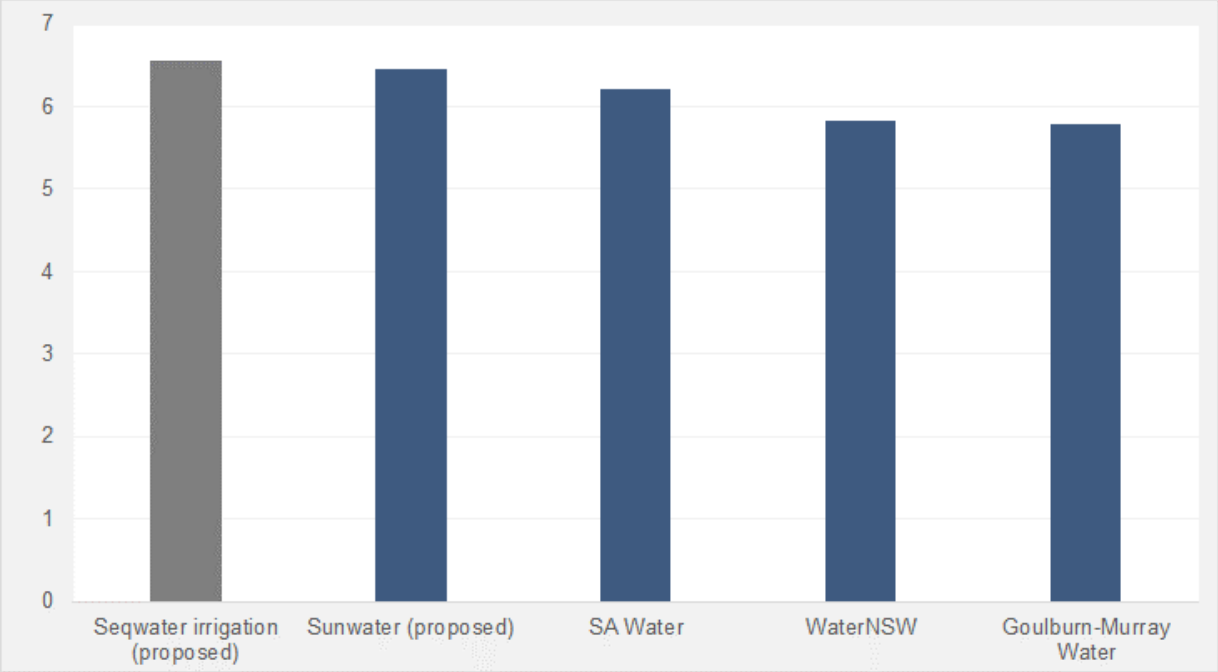
The objective of performing a WACC normalisation task against regulatory decisions for other potentially comparable businesses is to get a sense of the reasonableness of the WACC proposal from an overall perspective.

[113] Seqwater, sub. 1, pp. 7–8.
[114] Seqwater, sub. 1, p. 44.
[115] Seqwater, sub. 1, p. 44.

To perform the normalisation, we have used a March 2024 averaging period to compare regulatory rate of returns. It is important to note that as the task of the normalisation process is to generate an estimate of what the regulator would have determined the rate of return to be at the same point in time, various assumptions are required. As such, the outcomes of this exercise are not determinative and should be treated with some level of caution.

As can be observed in Figure 6, Seqwater's proposed WACC sits to the top end of the range of comparable businesses. Each of the businesses that we have compared have some degree of business operations devoted to irrigation customers. However, SA Water also services a large residential customer base, and for that reason we might expect it would face a lower level of risk than Seqwater. While the Seqwater WACC sits at the top end of the range, we consider this is consistent with our assessment of relative risk – the result is not unreasonable.

Figure 6: Normalised WACC comparisons for selected Australian regulated businesses (%)



Sources: Sunwater, sub. 9; Seqwater, sub. 1; ESCOSA, *SA Water Regulatory Determination 2024*, draft decision, January 2024; ESC, *Goulburn-Murray Water draft decision*, 2024 Water Price Review, March 2024; IPART, *WACC calculator*, February 2024.

6.3.4 Overall considerations

Seqwater's proposed WACC largely reflects estimates that are in line with those produced using the methods set out in our 2021 rate of return review. Although Seqwater has proposed a slightly higher MRP than our own estimate, we consider the difference to have an immaterial impact on the overall rate of return. Furthermore, while Seqwater's proposed WACC sits towards the top end of WACCs as part of the normalisation exercise, we do not consider this is unreasonable given our assessment of relative risk, nor does it require us to make a top-down adjustment to Seqwater's proposed WACC.

Subject to updated estimates of time-varying parameters (risk-free rate and cost of debt), we consider that Seqwater's proposed WACC is likely to be reasonable and provides a return on investment commensurate with the regulatory and commercial risks involved. As part of this draft report, we have adopted a draft WACC of 6.55%.

7 Total allowable costs

In this chapter, we set out our draft position on the total allowable costs for the specified schemes in the referral. To determine total allowable costs, we add together our proposed opex, renewals allowance, and allowance for tax, and then deduct revenue from miscellaneous fees and charges.

7.1 Total allowable costs

We used the building block approach to determine prudent and efficient allowances for each component of allowable costs:

- an opex allowance – the ongoing costs of running the business and maintaining assets, including operations, maintenance and administration costs and an end-of-period adjustment for the cost of review events that occurred in the current price path period (Chapter 4)
- a renewals expenditure allowance – an appropriate allowance for the prudent and efficient costs of renewing existing assets (section 7.2.1), reflecting our assessment of prudent and efficient renewals expenditure (Chapter 5), the opening annuity balance (section 7.2.2) and an appropriate rate of return (Chapter 6)
- tax – consistent with our post-tax nominal approach to the weighted average cost of capital (WACC), we include an allowance for tax as part of total costs (section 7.3).

To determine total allowable costs, we add the components together and then deduct the revenue Seqwater earns from other sources (section 7.4).

Based on our findings for each of these components, our draft position on total allowable costs is provided in Table 22.

Table 22: QCA draft position – total allowable costs[a] ($ million, nominal)

Cost component	QCA draft position					Seqwater proposed	Difference
	2025-26	2026-27	2027-28	2028-29	Total[c]		
Opex[b]	7.5	7.7	7.9	8.2	**31.3**	31.1	**0.1**
Renewals allowance	1.6	1.6	1.7	1.7	**6.6**	7.4	**(0.8)**
Tax allowance	–	–	–	–	**-**	-	**-**
Revenue offset	(0.1)	(0.1)	(0.1)	(0.1)	**(0.5)**	(0.5)	**-**
Total allowable costs[c]	**9.0**	**9.2**	**9.5**	**9.8**	**37.4**	**38.1**	**(0.6)**

a Figures in this table relate to costs allocated to irrigation and non-irrigation customers in regulated schemes. b Includes QCA fee and review event adjustments. c Totals may not sum due to rounding.
Source: Seqwater, sub. 1; QCA analysis.

7.2 Renewals allowance

Consistent with previous price path periods, Seqwater proposed a rolling annual annuity approach to recover prudent and efficient expenditure on the renewing existing assets.

7.2.1 Appropriate approach to recovering renewals expenditure

In previous irrigation price reviews, we used a renewals annuity approach to derive an appropriate allowance for prudent and efficient expenditure on renewing existing assets.

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 base (RAB) approach for funding the irrigators' share of asset renewal costs.[116] Seqwater noted that in the Treasurer's letter accompanying the referral for this investigation, it was stated that this remains subject to ongoing consideration, with proposals from the water businesses relating to a RAB-based methodology not expected to be available for consideration by us as part of this review.[117]

Seqwater said that it has continued to apply the renewals annuity approach to recover its renewals expenditure for this review.[118] Seqwater said that in engaging with customers in developing its pricing proposal, none of Seqwater's customers raised any concerns regarding the current annuity approach or indicated any interest in moving to a RAB-based approach.[119]

In the 2020 review, we noted that a growing number of larger rural water businesses have transitioned to a RAB-based approach. We noted that one of the reasons for the transition was the uncertainty associated with costs and demand.[120] Seqwater noted the difficulty in forecasting long-term renewals due to the absence of a robust approach to estimating renewals expenditure forecasts beyond the next 10 years.

In section 7.2.2 of the Sunwater draft report,[121] we note that the RAB approach generally has improved efficiency properties, would generally lead to improved allocation of costs to customer cohorts over time and could lead to improved transparency. However, we also note that there would be transitional impacts that would need to be managed, including potential impacts on the cash flows of the water businesses and initial price impacts on customers.

The Treasurer's letter accompanying the referral for this investigation noted that the Minister for Water had advised that the associated work on options and financial implications was complex and ongoing, with further work required to ensure there were no adverse consequences for both customers and the businesses.[122]

While we understand the difficulties of exploring a RAB approach for this review process, we consider that this option should be considered for future reviews by Seqwater.

7.2.2 Opening annuity balance as at 1 July 2025

The 2020 review incorporated actual renewals expenditure up to and including 2017–18. Therefore, we have rolled forward the annuity balance from 1 July 2018 with prudent and efficient renewals expenditure.

Seqwater maintains separate annuity accounts for:

- metering renewals expenditure – which is fully allocated to medium priority customers

[116] QCA, R*ural Irrigation Price Review 2020–24, Part C: Seqwater*, final report, January 2020, p. 25.
[117] Seqwater, sub. 1, p. 18.
[118] Seqwater, sub. 1, p. 41.
[119] Seqwater, sub. 1, p. 41.
[120] QCA, *Rural irrigation price review 2020-24, Part C: Seqwater*, final report, January 2020, pp. 21–22.
[121] QCA, *Rural irrigation price review 2025–29: Sunwater*, draft report, June 2024.
[122] C Dick (Treasurer and Minister for Trade and Investment), covering letter to the referral notice to the QCA, 10 March 2023.

- non-metering renewals – which is allocated to medium priority customers using the headworks utilisation factor for bulk schemes and water access entitlements (WAEs) for distribution systems.

Our calculation of the opening annuity balance for the price path period for non-metering renewals expenditure is set out in Table 23.

Table 23: QCA draft position – calculation of opening annuity balance, non-metering renewals expenditure ($ million, nominal)[a]

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Opening annuity	**(5.9)**	**(6.4)**	**(7.0)**	**(8.0)**	**(7.7)**	**(7.6)**	**(6.8)**
Plus: annuity revenue	0.9	0.9	1.3	1.6	1.7	1.7	1.7
Plus: other revenue	–	–	–	–	–	–	–
Less: renewals costs	1.0	1.1	1.9	1.0	1.3	0.5	0.5
Plus: interest	(0.4)	(0.4)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)
Closing annuity[b]	**(6.4)**	**(7.0)**	**(8.0)**	**(7.7)**	**(7.6)**	**(6.8)**	**(5.9)**

a This is the annuity account for non-metering renewals recoverable from irrigation and non-irrigation customers in regulated schemes. b Totals may not add due to rounding.
Source: Seqwater pricing model 2023; QCA analysis.

Our calculation of the opening annuity balance for the price path period for metering renewals expenditure is set out in Table 24.

Table 24: QCA draft position – calculation of opening annuity balance, metering renewals expenditure ($ million, nominal)[a]

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Opening annuity	**(1.1)**	**(1.9)**	**(3.9)**	**(5.3)**	**(5.6)**	**(5.9)**	**(4.9)**
Plus: annuity revenue	0.2	0.3	0.2	0.2	0.2	0.2	0.2
Plus: other revenue[b]	–	–	0.4	0.2	1.4	1.3	–
Less: renewals costs	1.0	2.3	1.8	0.5	1.6	0.2	0.6
Plus: interest	(0.1)	(0.1)	(0.2)	(0.2)	(0.2)	(0.3)	(0.2)
Closing annuity[c]	**(1.9)**	**(3.9)**	**(5.3)**	**(5.6)**	**(5.9)**	**(4.9)**	**(5.5)**

a This is the annuity account for metering renewals recoverable from medium priority (including irrigation) customers in regulated schemes. b This includes government funding of $2.5 million for the modernisation program in the Central Lockyer Valley scheme (Seqwater, sub. 3, p. 17). c Totals may not add due to rounding.
Source: Seqwater pricing model 2023; QCA analysis.

Seqwater said that its approach to rolling forward the annuity balance was consistent with the previous review and our March 2023 guidelines for pricing proposals.[123]

Our calculation updated Seqwater's proposed opening annuity balances for 2025–26 by rolling the annuity balance forward over the period 2018–19 to 2024–25. The roll-forward occurs each year by adjusting each year's opening balance to:

- add the renewals annuity allowance from the 2020 review
- subtract our proposed prudent and efficient renewals costs (see Chapter 5)

[123] Seqwater, sub. 1, p. 42.

- adjust for interest from 2020–21 onwards using the recommended post-tax nominal WACC of 4.37% from the 2020 review.

The starting point for our assessment is the opening annuity balances for 2018–19. We have reviewed Seqwater's 2018–19 opening annuity balances and confirmed that they reconcile with our recommended 2018–19 opening annuity balances for all schemes except for Mary Valley water supply scheme. The opening balance in this scheme is different due to lower than previously estimated expenditure in the 2017–18. We have accepted the opening balances proposed by Seqwater.

Our assessed annuity revenue allowance for 2024–25 was the 2023–24 allowance, increased by our forecast inflation from the 2020 review (2.24%), in line with the increase in the price targets used by the government to set prices in 2024–25. We note that although Seqwater's submission indicated that the renewals allowance was increased by 2.24%, its pricing model suggests that it increased the allowance by 3%.

7.2.3 Our proposed renewals allowance

Our proposed renewals allowance calculated using a renewals annuity approach is set out in Table 25 below. Scheme level information is in Appendix C.

Table 25: QCA draft position on renewals allowance ($ million, nominal)

	2025-26	2026-27	2027-28	2028-29	Total
Seqwater proposed	1.8	1.8	1.9	1.9	**7.4**
QCA adjustments	(0.2)	(0.2)	(0.2)	(0.2)	**(0.8)**
QCA draft position	**1.6**	**1.6**	**1.7**	**1.7**	**6.6**

Note: Figures in this table relate to the renewals allowance recoverable from irrigation and non-irrigation customers in regulated schemes. Totals may not add due to rounding.
Source: Seqwater, sub. 1, pp. 45–46; QCA analysis.

Consistent with the 2020 review, we calculated the renewals allowance using a rolling annuity approach with a 30-year planning period.

Ideally, a renewals annuity approach would be based on a planning period of longer than 30 years. However, such a long timeframe would make it difficult to accurately forecast expenditure and this would be exacerbated over longer periods.

In indexing the annuity, we have used our estimate of inflation of 2.52% which is derived by taking the 10-year geometric average of our CPI inflation forecasts (see section 6.2.1).

7.3 Tax allowance

Seqwater said that consistent with the approach applied in the 2020 review, it was not proposing a tax allowance for irrigation services.[124]

In the 2013 review, we said that the QCA-recommended efficient costs were equivalent to the definition of lower bound costs, which excluded a tax allowance.[125] However, in the 2020 review, the definition of allowable costs was no longer tied to the lower bound definition and included a tax

[124] Seqwater, sub. 1, p. 47.
[125] QCA, *Seqwater Irrigation Price Review: 2013–17*, final report, volume 1, April 2013, p. 222.

allowance, if applicable.[126] We accepted Seqwater's proposal in the 2020 review to not include a tax allowance.[127] We consider that a zero tax allowance remains appropriate due to accumulating negative annuity balances (and therefore tax losses) over the current price path period from 1 July 2020 to 30 June 2025.

7.4 Revenue offsets

Consistent with previous reviews, Seqwater has identified relatively small amounts of revenue from other sources that has been deducted as a revenue offset in the relevant schemes.[128] The total amount of these offsets for all schemes is around $0.1 million in each year of the price path period.

We have accepted Seqwater's proposed revenue offsets. These revenue offsets are deducted from total costs and are shared between irrigation and other customers.

[126] Irrigation price investigation 2020-24, *referral notice*, October 2018, para. C(1.2).
[127] See QCA, *Rural Irrigation Price Review 2020–24, Part C: Seqwater*, final report, January 2020, pp. 91–93.
[128] Seqwater, sub. 1, pp. 47–48.

8 Forecast volumes

The chapter outlines our views on the water access entitlements (WAEs) and forecast usage for each tariff group. Both are inputs into the calculation of price targets and prices, in particular:

- in the allocation of some fixed costs between medium and high priority tariff groups in each scheme
- using WAEs as the denominator in deriving fixed (Part A and Part C) price targets
- using forecast usage as the denominator in deriving volumetric (Part B and Part D) price targets.

We have accepted the WAEs and forecast usage methodology proposed by Seqwater.

8.1 Water access entitlements

Most WAEs held by irrigators are medium priority WAEs, although there are low volumes of high priority irrigation WAEs in some schemes. Forecast WAEs are used in calculating prices and in allocating some fixed costs[129] between medium and high priority WAE customers in each scheme.

Seqwater said that its forecast WAEs were based on the latest available information on ownership of water allocations in each of its schemes. Seqwater did not propose any adjustments to its scheme-level WAEs, indicating that its approach was consistent with the approach used in the 2020 review.[130]

We have reconciled Seqwater's proposed WAE forecasts at the scheme level with our forecasts in the 2020 review and with information published on Seqwater's website.

Since the 2020 review, changes in the WAEs have occurred for the Central Lockyer Valley and Mary Valley water supply schemes.

Table 26: Schemes with changes in forecast medium priority WAEs since the 2020 review (ML)

Scheme	QCA 2020 review	Seqwater proposed WAE
Central Lockyer Valley	16,357	18,218
Mary Valley	21,899	21,672

Note: Includes WAE holdings of distribution system customers in these schemes.
Source: Seqwater, sub. 1, p. 49.

The prices derived in the 2020 review for the Central Lockyer Valley water supply scheme were based on the priority groups and volumes of water allocations in the interim resource operations licence (ROL) in place at the time of the final report in January 2020. The final water entitlement notice[131] (which set out the volumes of water allocations being converted), water management protocol, operations manual and ROL were released in March 2020.

[129] Except for asset-related headworks (bulk) costs, which are generally allocated between medium and high priority WAE customers using the headworks utilisation factor.
[130] Seqwater, sub. 1, p. 49.
[131] Department of Natural Resources, Mines and Energy, *Water Entitlement Notice*, Central Lockyer Valley Water Supply Scheme, Water Plan (Moreton) (Supply Scheme Arrangements) Amendment Plan 2019, Queensland Government, March 2020.

The proposed Mary Valley WAEs do not include Seqwater's holdings of the distribution losses that was determined in the 2020 review.[132] As outlined in section 9.1, these distribution losses are now assigned to irrigation customers.

Seqwater said it permanently sold 200 megalitres (ML) of its own high priority WAEs in the Warrill Valley water supply scheme to irrigation customers in March 2022.[133] This requires the creation of a new high priority irrigation tariff group in this scheme (see section 9.4.1).

8.2 Usage

To establish a meaningful water use denominator to derive volumetric price targets, we consider that the approach to estimating the assumed level of water use should be representative of normally occurring conditions, consistent with our approach to estimating baseline-year costs.

Seqwater submitted that the forecast water usage should be based on the following principles:

- simplicity and transparency
- regulatory certainty and predictability
- price stability
- reflect the most accurate and reliable data available.[134]

Seqwater submitted that based on these principles, the forecast water usage should generally be based on a simple average of 20 years of data (2003–04 to 2022–23).[135] Seqwater said that adjustments to data should only be made where it can be demonstrated that this is necessary to produce a forecast that is more representative of normal operating conditions.

Seqwater has proposed adjustments to forecast usage volumes in the following schemes:

- Central Lockyer Valley – Seqwater proposed to add 10% to the 20-year average usage to adjust for faulty meters. Seqwater acknowledged that meters were faulty and the impact on usage measurement was uncertain. However, it proposed to absorb some of the risk associated with faulty meters by increasing forecast usage.[136]
- Mary Valley – Seqwater proposed to remove the years 2007–08 to 2011–12 from the calculation of the 20-year average on the basis that the Traveston Dam buy-back scheme likely impacted usage over this period.[137]

We note for each of these proposed adjustments, Seqwater was acting to address scheme-specific concerns from customer reference groups (CRGs) about the usage forecasts.[138]

We propose to accept Seqwater's proposed water usage forecast methodology.[139] We consider the continued use of a 20-year average to derive forecast usage to be reasonable as it covers a reasonably large number of observations to include a range of conditions that would impact water

[132] QCA, *Rural irrigation price review 2020-24, Part C: Seqwater*, final report, January 2020, p. 43.
[133] Seqwater, sub. 1, p. 58.
[134] Seqwater, sub. 1, p. 51.
[135] Seqwater, sub. 1, pp. 51–52.
[136] Seqwater, sub. 1, p. 51.
[137] Seqwater sub. 1, p. 51.
[138] Seqwater, sub. 3, p. 9; Seqwater, sub. 7, p. 9.
[139] Following the submission of its November 2023 pricing proposal, Seqwater advised us that the Morton Vale Pipeline calculation forecast of 601 ML should have been 611 ML (Seqwater, response to RFI 15). For Logan River, Mary Valley and Warrill Valley the high priority 20-year average used in the pricing model by Seqwater was the same figures from the 2020 review, a 20-year average from 1999–00 to 2018–19. We have updated the high priority water usage figures to be a 20-year average for the years 2003–04 to 2022–23.

usage. We consider that a simple averaging approach results in revenue and pricing outcomes that are both simple and transparent to customers.

We also consider that both scheme-specific adjustments to the general 20-year average are reasonable in developing a forecast representative of normally occurring conditions, with Seqwater acting to address concerns raised by stakeholders and taking on risk without inefficiently shifting costs to other parties.

8.3 Draft forecasts

We have accepted Seqwater's proposed WAEs and usage percentages for each scheme which are presented in Table 27. The usage volumes are also compared with those applied to derive prices in the 2020 review.

Table 27: WAEs and usage forecasts by scheme

Scheme	Service	WAEs (ML)[a]	Usage forecasts (ML)	
			QCA draft	2020 review
Cedar Pocket	Bulk	495	301	298
Central Lockyer Valley	Bulk	18,218	5,962	6,213
Morton Vale Pipeline	Distribution	5,051	611	790
Logan River	Bulk	13,555	6,874	7,473
Lower Lockyer Valley	Bulk	11,120	1,465	2,274
Mary Valley	Bulk	21,842	13,104	10,491
Pie Creek	Distribution	835	211	212
Warrill Valley	Bulk	20,170	6,839	8,126

Note: Includes WAEs held and usage by medium and high priority customers, including all distribution losses.
Source: Seqwater, sub. 1, p. 43; Seqwater pricing model, November 2023.

9 Draft price targets

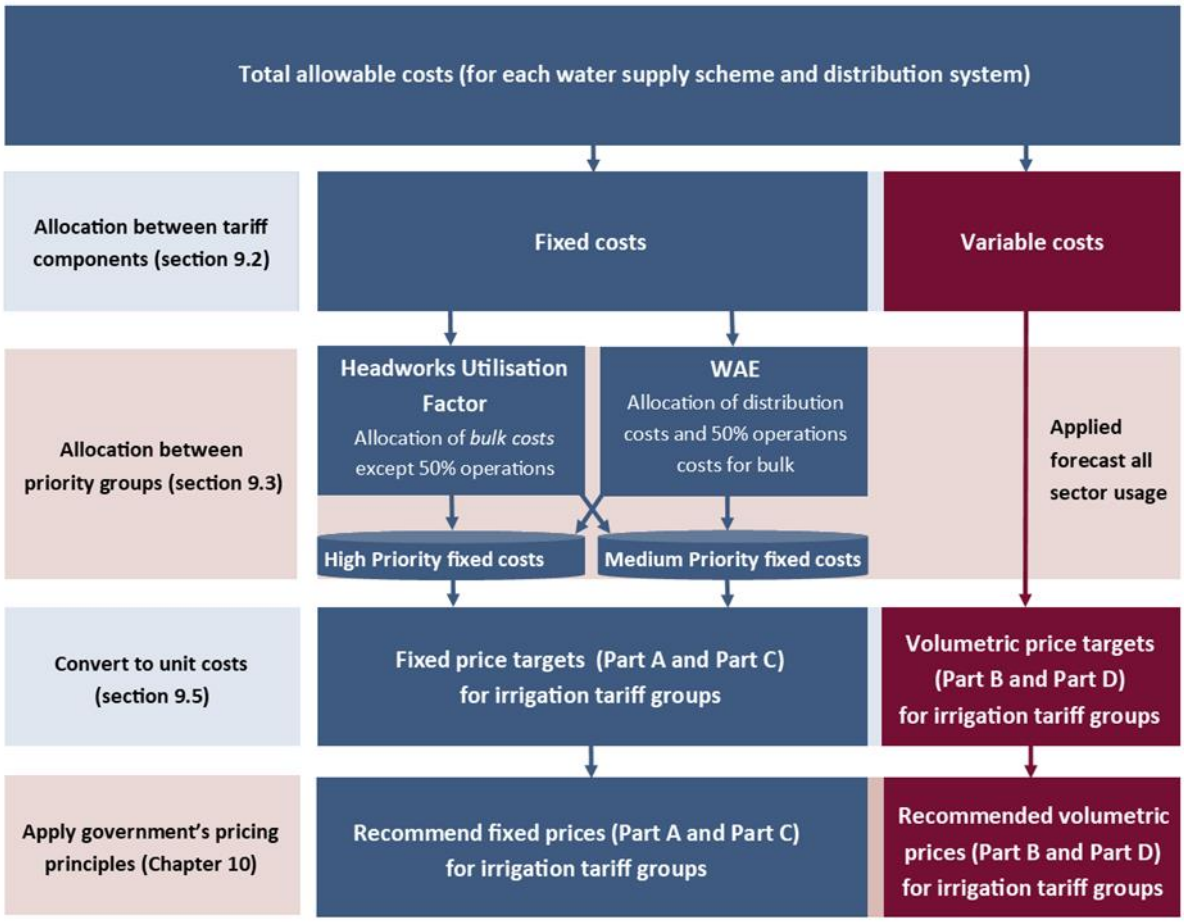
This chapter outlines how we have converted total allowable costs to our draft prices for each tariff group over the price path period.

To derive allowable costs at the scheme level, we first made some adjustments between schemes to ensure that costs were allocated to the appropriate beneficiaries (section 9.1). We then converted allowable costs at the scheme level to a price target for each tariff group by:

1. allocating costs between the fixed and volumetric tariff components (section 9.2)
2. allocating costs between priority groups (that is, high priority and medium priority customer groups) (section 9. 3)
3. allocating costs between tariff groups (where applicable), or other scheme-specific adjustments (section 9.4)
4. converting allocated costs into a unit cost for each tariff component (for example, a cost per megalitre (ML) of water usage), then smoothing these unit costs over the price path period to derive the price target for each tariff group (section 9.5).

We then applied the government's pricing principles to establish the transitional path to the price target for each tariff group and derive draft prices (Chapter 10). Our general approach to deriving draft prices is shown in Figure 7.

Figure 7: Our general approach to deriving irrigation prices



9.1 Total allowable costs at the scheme level

Seqwater's total allowable costs are shown in Chapter 7. To derive allowable costs at the scheme level, we have adjusted for distribution loss transfers.

Other scheme-specific adjustments are considered in section 9.4.

9.1.1 Distribution loss transfers

Seqwater owns distribution loss water access entitlements (WAEs) in its distribution systems (Pie Creek and Morton Vale Pipeline) and some bulk water supply schemes (Lower Lockyer Valley and Warrill Valley) to account for distribution losses that may occur through pipe leakage, evaporation, storage seepage, overflows and drainage for maintenance. Distribution loss holdings ensure that Seqwater's customers continue to receive a reliable supply of water. These WAEs were granted to Seqwater under the *Water Act 2000* (Qld).

These holdings are relatively small (5,715 ML) and include:

- Pie Creek high priority (60 ML) and medium priority (256 ML)
- Morton Vale Pipeline high priority (185 ML)
- Lower Lockyer Valley medium priority (1,500 ML)
- Warrill Valley medium priority (3,714 ML).[140]

Losses associated with the Lower Lockyer Valley and Warrill Valley water supply schemes are not genuine distribution losses, as they are losses associated with bulk assets, which relate to losses from channels and pipelines within a bulk tariff group.

Our approach in the 2020 review was that distribution system customers should only be allocated the costs associated with the level of distribution loss WAEs required to meet actual losses. This approach reflected the fact that distribution customers are unable to control the level of distribution loss WAEs and that Seqwater, as the owner of these WAEs, is responsible for their management within its distribution systems. We calculated the efficient level of distribution loss WAEs as the maximum distribution loss WAEs required over a period of time, after adjusting for usage.[141] That review found excess distribution loss holdings in both Pie Creek and Morton Vale Pipeline distribution systems.[142] We also said that Seqwater should review is distribution loss WAEs and develop a strategy for their future treatment prior to this review.

In its proposal Seqwater outlined the steps that would be required to apply to the relevant government agency to change the purpose of distribution loss WAEs, including investing in scheme efficiencies, establishing actual distribution losses required and the installation of additional flow monitoring to provide evidence of actual distribution losses. Seqwater considered that given its small holdings of distribution loss WAEs, the costs of undertaking these tasks would likely be greater than any subsequent benefits from successfully changing the classification of distribution loss WAEs. Seqwater said this was also the view of its customers.[143]

We acknowledge that Seqwater has investigated this issue and engaged with its customers. Our focus in this review is on the Morton Vale Pipeline and Pie Creek schemes, as these were the schemes we identified as holding excess distribution loss WAEs in the 2020 review, and we are not

[140] Seqwater, sub. 1, p. 58.
[141] When announced allocations are less than 100%, the water to provide for losses is lower than the distribution loss WAEs. As water available to customers is also reduced, usage within the system will decrease. As a result, we adjusted the actual distribution loss data to account for the level of distribution system usage.
[142] QCA, *Rural irrigation price review 2020–24, Part C: Seqwater*, final report, January 2020, pp. 40–43.
[143] Seqwater, sub. 1, p. 58.

aware of any changes since then. Both of these schemes have very low levels of distribution losses. We also recognise that customers in both schemes considered it was not feasible to investigate further given the immateriality of the distribution loss WAE holdings and have endorsed Seqwater's proposal.

Given Seqwater has demonstrated that it is unlikely to be cost-effective to change the classification of the potentially low level of excess distribution losses, and given Seqwater's approach is supported by customers, we have allocated all distribution losses in these schemes to customers.

9.2 Allocation of costs between tariff components

Costs must be allocated between fixed and variable (volumetric) tariff components. Our approach to the allocation of costs between tariff components is to take account of the underlying nature of the cost structure – that is, whether costs are fixed or variable with usage. This is consistent with the requirement in the referral for us to consider the fixed and variable nature of the underlying costs in relation to tariff structures.[144]

The allocation of costs between fixed and volumetric components may also vary between schemes.

Seqwater has proposed an approach to allocating costs between fixed and volumetric tariff components for this price path period that is consistent with the approach we recommended in the 2020 review. Seqwater said it proposed this approach to maintain a stable and predictable regime, and that it also considered customer support for maintaining the QCA's allocation approach. Nevertheless, Seqwater noted that it remained concerned that this cost allocation approach overstates the proportion of costs that genuinely vary with changes in water deliveries, and that it will continue to monitor this over the next price path period.[145]

Electricity costs

Electricity costs are most relevant to distribution systems, due to the cost of pumping water. In the 2020 review, we assigned base-year electricity costs between fixed and variable costs to reflect the fixed and variable nature of the underlying costs. As a result, electricity was considered a variable cost, as it largely varies with usage. Seqwater has not proposed any change to this allocation approach for this review, and stakeholders have not raised any issues on this matter.

We consider that given the underlying variable nature of electricity costs, it is appropriate to continue to allocate 100% of electricity costs to the variable tariff component. Base-year electricity costs for the Pie Creek distribution system are shown in Table 28.

Table 28: Base-year electricity costs for Pie Creek distribution system, 2022–23

Tariff group	Variable cost ($/ML)	Usage forecast (ML)	Total variable cost ($'000)	Total fixed cost ($'000)	Total base year cost ($'000)
Pie Creek	65.40	211	13.8	0.8	14.6

Note: We corrected Seqwater's submitted fixed cost for a modelling error.
Source: Seqwater pricing model 2023; QCA analysis.

[144] Referral, para. C(1.1)(a).
[145] Seqwater, sub. 1, p. 55.

Other costs

The 2020 review adopted a 20% allocation of direct operations and maintenance costs as variable costs. This reflected our view that this was a simple and transparent approach that broadly reflected the underlying fixed and variable nature of the costs of operating Seqwater's irrigation schemes.

For this review, Seqwater has not proposed any change to the allocation of other costs (direct operations and maintenance) adopted in the 2020 review. Although Seqwater had concerns that this approach overstates the extent of variable costs, it proposed to continue with it to maintain stability and predictability in the pricing regime.

We consider that the approach of allocating 20% of direct operations and maintenance costs as variable costs remains appropriate. Seqwater has not advised of any significant change to its operational and maintenance practices since the 2020 review that would warrant a change in this cost allocation approach and has not provided any new information on the underlying nature of these costs. Stakeholders have not raised this issue or proposed any alternative approach. We therefore propose to retain the same cost allocation approach as adopted in the 2020 review for direct operations and maintenance costs.

Summary

Table 29 shows our proposed fixed/variable cost allocations for Seqwater.

Table 29: Allocation of costs to the volumetric tariff component – QCA draft approach (%)

Activity	Seqwater's proposal	QCA draft
Direct operations and maintenance[a]	20	20
Electricity pumping costs	Pie Creek only	Pie Creek only
All other costs	–	–

a Excludes electricity costs.

9.3 Allocation of costs between priority groups

Seqwater's customers hold entitlements that are defined in terms of the reliability or priority group of the entitlement – for example, medium or high priority WAEs. High priority WAE holders have greater reliability and can access their nominal volume more often than holders of medium priority WAEs. They also tend to be allocated a larger share of their WAEs when water supplies are low. Customers holding medium priority entitlements often do not get any water until high priority WAE holders have received 100% of their nominal volume. It is necessary to account for these different levels of service in our cost allocation approach.

Seqwater has proposed to allocate costs between priority groups using the headworks utilisation factor (HUF). This is the same methodology that Seqwater proposed in the 2013 and 2020 reviews and that we accepted. This allocation methodology only applies to bulk schemes. Seqwater submitted that for the two schemes that only supply medium priority customers (Cedar Pocket Dam and Lower Lockyer Valley), there is no need to allocate costs between different priority groups.[146]

[146] In the 2020 review, for Cedar Pocket Dam, Central Lockyer Valley and Lower Lockyer Valley schemes, given that materially all customers were allocated medium priority WAEs, we allocated fixed costs using WAEs. We allocated 100% of fixed costs to medium priority customers in the Cedar Pocket and Lower Lockyer Valley schemes, and 98.9% to medium priority customers in the Central Lockyer Valley scheme.

Given this, Seqwater reviewed[147] and updated the HUFs for the Central Lockyer Valley,[148] Logan River, Mary Valley and Warrill Valley water supply schemes (Table 30).

Table 30: Seqwater's proposed headworks utilisation factors (%)

Scheme	2020 review (%)	Seqwater proposed (%)	Reason
Central Lockyer Valley	98.9	99.1	New WAE calculation based on updated proportions of total nominal volumes of high and medium priority water allocations
Logan River	2	1	Reduction in medium priority HUF is attributable to increased high priority water allocations included in the water sharing rules and supply by the scheme
Mary Valley	11	11	No change to rules or data inputs since 2020
Warrill Valley	10	9	Reduction in medium priority HUF is attributable to inclusion of a new cut-off rule plus a change to the high priority reserve term in the water sharing rules

Source: Seqwater, sub. 1, p. 55.

Seqwater did not propose any change to the Mary Valley HUF as there were no changes to rules or data inputs since the 2020 review.

For the Cedar Pocket and Lower Lockyer Valley water supply schemes and the two distribution systems (Morton Vale Pipeline and Pie Creek), Seqwater has proposed that 100% of fixed costs are allocated using nominal WAEs.[149]

We consider that it is the storage capacity required to deliver water that drives costs for each priority group, and therefore it is an appropriate basis for cost allocation between priority groups. This approach shows that storage-related infrastructure costs are higher for high priority WAEs than for medium priority WAEs. The HUF methodology estimates the relative share of storage assets in each WSS required to supply medium and high priority WAEs. We consider that the allocation of costs between priority groups using the HUF is an appropriate approach as it reflects the underlying cost drivers for different priority WAEs. This is the same approach we adopted in the 2020 review, and we consider it remains appropriate for the 2025 review.

We have used the approach set out in Table 31 to allocate fixed costs for each cost component.

Table 31: Fixed cost allocation between medium and high priority WAEs – QCA draft position

Cost component	Fixed cost allocation methodology	
	Bulk schemes	Distribution systems
Repair and maintenance	HUF	WAE
Insurance	HUF	WAE
All other operating costs	50% by HUF, 50% by WAE	WAE
Renewals annuity	HUF	WAE

[147] Seqwater engaged Badu Advisory to review and update the HUFs for the relevant schemes (Seqwater, sub. 8).
[148] Seqwater noted that the high priority water within the Central Lockyer Valley scheme relates to the distribution loss allocation of 185 ML; hence, the HUF for high priority water within the Central Lockyer Valley scheme is very small (Seqwater, sub. 1, p. 54).
[149] Seqwater, sub. 1, p. 55.

Our approach to allocating fixed costs between medium and high priority WAEs is as follows:

- For bulk WSSs where there are different priority groups (Central Lockyer Valley, Logan River, Warrill Valley, Mary Valley water supply schemes), 50% of fixed operations costs are allocated by nominal WAEs, with the remaining cost allocated using the HUF (or equivalent) in Table 32 below.
- For Cedar Pocket and Lower Lockyer Valley water supply schemes, all fixed costs are allocated to medium priority WAEs.
- For distribution systems (Morton Vale Pipeline and Pie Creek), all fixed costs are allocated using nominal WAEs.

We have reviewed the updated HUFs proposed by Seqwater and consider they have been derived appropriately, using the HUF methodology that we adopted in the 2013 and 2020 reviews.

Table 32 show our proposed cost allocation compared to the 2020 review.

Table 32: Allocation of fixed asset related costs to medium priority – QCA draft position (%)

Water supply scheme	2020 review	QCA draft
Central Lockyer Valley	98.9	99.1
Logan River	2	1
Warrill Valley	10	9
Mary Valley	11	11
Cedar Pocket	100	100
Lower Lockyer Valley	100	100

Source: QCA, *Rural irrigation price review 2020-24, Part C: Seqwater*, final report, January 2020; QCA analysis.

9.4 Allocation of costs between tariff groups

Costs may need to be further allocated to tariff groups to reflect other cost differences within a scheme or priority group. However, most of Seqwater's bulk water supply schemes have only a single tariff group. For the two distribution systems – Morton Vale Pipeline (part of the Central Lockyer water supply scheme) and Pie Creek (part of the Mary Valley water supply scheme) – there is a single tariff group applicable to each distribution system. Given this, scheme allowable costs do not need to be adjusted to allocate costs between tariff groups within a scheme.

However, Seqwater has proposed a different pricing approach for the Warrill Valley water supply scheme. Also, the referral specifies a particular pricing approach for the Central Lockyer Valley water supply scheme. These scheme-specific matters are addressed below.

9.4.1 Warrill Valley water supply scheme

Retaining an over-recovery of revenue

Seqwater submitted that customers in the Warrill Valley water supply scheme expressed a preference for a constant (or relatively stable) price over time. Seqwater said that customers in this scheme are willing for Seqwater to be able to over-recover revenue to keep prices constant – as opposed to decreasing in line with the price targets – with a view to allowing Seqwater to 'bank' that additional revenue to apply to any future cost increases. Seqwater acknowledged that this approach

is not consistent with the government's pricing principles; however, it considered it was appropriate because it is in response to a clear preference of scheme customers and because:

- other than allowing Seqwater to retain any over-recovered revenue from fixed prices, the overall approach complies with the pricing principles and the referral
- over-recovery of revenue was permitted under the previous pricing principles
- Seqwater must demonstrate that any over-recovery of revenue is only applied to reduce the revenue required to compensate it for future increases in allowable costs in this scheme
- it will not impact any customers outside of the Warrill Valley water supply scheme.[150]

We acknowledge that Seqwater's proposal is in response to feedback from its customers in this scheme seeking to achieve stable prices over time.[151] We have not received any submissions from stakeholders on this matter. This is the same approach Seqwater adopted for the current price path period, whereby additional revenue earned (from the actual price exceeding the cost–reflective price) is accrued within the scheme's metering annuity to stabilise prices. While we did not recommend that pricing approach in the 2020 review, we said that recommendation did not prevent Seqwater from returning the surplus revenue above the cost target to schemes.[152]

For this review, the pricing principles in the referral specify that prices for all tariff groups are to transition from the 2024–25 fixed and volumetric prices towards the respective price targets. Once both the total fixed and volumetric price meet the respective fixed and volumetric price targets for a tariff group, the price target is to apply for that tariff group for the remainder of the price path period.[153]

We consider that the pricing principles provide clear direction on this matter and differ from those that applied in the 2020 review. Applying the current pricing principles in the Warrill Valley scheme means that Seqwater would be unable to accrue additional revenue due to the actual price exceeding the price target for a period of time (and to allow that additional revenue to be returned to the scheme). Seqwater's proposal, while it has some merit in terms of stabilising prices and responding to customer preferences, is precluded by the terms of the referral. We note that the 2024–25 fixed price is below our draft 2025–26 fixed price target, so in the context of this report there will not need to be a reduction in the fixed price under the pricing principles.

High priority prices

In March 2022, Seqwater sold 200 ML of its own high priority WAEs, split into smaller parcels, to existing irrigation customers. As the Warrill Valley water supply scheme previously did not include high priority WAEs, a high priority WAE price target is now required.

Seqwater's proposed Part A and Part B cost–reflective prices for these high priority WAEs in the Warrill Valley scheme have been derived as follows:

- The total allowable costs to be recovered by Part A and Part B (high priority) prices was determined by deducting the fixed and variable irrigation share of total costs from the fixed and variable overall total costs for this scheme.
- The Part A (high priority) price target was derived by dividing the Part A (high priority) total allowable costs by forecast high priority WAEs.

[150] Seqwater, sub. 1, pp. 56–57.
[151] Seqwater said this proposal was made at the request of the Customer Reference Group for this scheme (Seqwater, sub. 7, p. 8).
[152] QCA, *Rural irrigation price review 2020–24, Part C: Seqwater*, final report, January 2020, p. 29.
[153] Referral, Sch. 2, paras A and C.

- The Part B (high priority) price target was derived by dividing Part B (high priority) total allowable costs by forecast high priority water usage.

As water is taken from a single meter – and it is therefore not possible to determine whether high priority or medium priority water has been taken – Seqwater has proposed to set the Part B (high priority) tariff equal to the proposed part B (medium priority) price for the Warrill Valley scheme.[154]

We consider Seqwater's proposed approach to establishing this new tariff is reasonable. Calculating the Part A component based on volume of WAEs and the Part B component based on usage is consistent with the pricing approach adopted for other Seqwater schemes and tariff groups. This proposal also does not involve any cost shifting between customers or groups of customers within the scheme, and so is consistent with the terms of the referral.[155]

9.4.2 Central Lockyer Valley water supply scheme

The pricing principles in the referral include a requirement that for the Central Lockyer Valley scheme, the costs of Seqwater providing the low priority groundwater product are not to be recovered in prices.[156] Our recommended prices for this scheme are consistent with this requirement.

9.5 Deriving the price target

The final step in deriving the price target for each tariff group is for the allocated costs to be converted into a unit cost for each of the tariff components (i.e. fixed and variable cost per ML) using the volume forecasts from Chapter 8. These unit costs are then smoothed over the price path period using our measure of inflation to derive the price target for each tariff group.

The fixed (Part A and C) prices are based on WAEs in each tariff grouping. The volumetric (Part B) price reflects the average water use for the scheme as a whole, based on the average 20-year water use (see Chapter 8).

Our estimates of price targets (based on a renewals annuity approach) for each scheme are included in Appendix D.

[154] Seqwater, sub. 1, pp. 58–59.
[155] In defining the price target, the referral states that where new tariff groups are to be considered, we are to avoid shifting costs from one customer or group of customers to another, within a scheme, in the absence of the business having significant commercial interest in the change, and in the absence of agreement from customers.
[156] Referral, Sch. 2, para. G.

10 Draft prices

The last step to reach our draft price recommendations is to apply the government's pricing principles to establish the transitional path to the price target for each tariff group. The pricing principles specify the rules for transitioning the price targets to our draft prices, although there are exceptions to the strict application of the transitional element of the pricing principles in special cases.

Where customers reach the price target during the price path period, their prices reflect the price target for the rest of the period.

We are directed under the referral to recommend appropriate prices and, for relevant water supply schemes, other prices including drainage prices, water harvesting prices and termination fees to be charged by Seqwater for the price path period.[157] This chapter sets out:

- how the government's pricing principles apply, and our draft price recommendations (section 10.1)
- our approach to recommending miscellaneous charges, relating to the termination fees charged by Seqwater (section 10.2).

10.1 Draft recommended prices

Seqwater draft recommendation 1

We recommend that prices for irrigation customers for each water supply scheme and distribution system should be set according to the prices set out in Appendix E, Tables 44 and 45.

The government's 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.[158]
- 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/ML (2024–25 dollars, 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.

[157] Referral, para. B(1.1)(a).
[158] Except for the fixed bulk (Part A) price for distribution system customers.

The referral also provides for special cases, where we may apply the transitional element of the government's pricing principles as we consider appropriate. These include where:

- allowable costs include an allowance for expenditure on improved service levels
- allowable costs include an allowance for capex associated with the augmentation of existing assets or new assets
- new tariff groups or new tariff components are considered.[159]

Seqwater has proposed a new tariff group for Warrill Valley high priority water access entitlements (WAEs) (section 10.1.1).

In all cases, where 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 applies for the remainder of the period.

Having applied the government's pricing principles as outlined above, our draft recommendation is that prices for irrigation customers for each water supply scheme and distribution system should be set according to the prices set out in Appendix E, Tables 44 and 45.

10.1.1 Warrill Valley high priority prices

The referral provides some flexibility in applying the pricing principles in certain circumstances – namely, where there are improved service levels, augmentations of existing assets or new assets, or new tariff groups or tariff components.[160]

Seqwater sold 200 ML of its own high priority WAEs in March 2022 to existing irrigation customers in the Warrill Valley scheme. As the scheme previously did not include high priority WAEs, Seqwater proposed to establish a high priority price target for these WAEs.

We accepted Seqwater's proposed approach to establishing this new tariff as reasonable (see section 9.4.1). We consider that it is appropriate for the new Warrill Valley high priority tariff group to transition immediately to the price target as it is a new tariff group created for a higher priority product (reflecting a higher level of service) and because customers in the scheme have chosen to purchase these higher priority WAEs.

Seqwater said it had set the volumetric (Part B) price for this tariff group below its proposed volumetric price target for high priority WAE since it was not possible to differentiate as to whether water taken is high or medium priority.[161] Given that we are required to apply the government's pricing principles for transitioning the price targets to our draft prices, we have instead adjusted the allocation of costs between the fixed and volumetric tariff components for this tariff group to ensure that the high and medium priority price targets are aligned.

10.2 Miscellaneous prices

The referral directs us to make recommendations about other prices, including drainage prices, water harvesting prices and termination fees.[162] Seqwater has proposed a price for termination fees for the Morton Vale Pipeline and Pie Creek schemes. It does not provide drainage, drainage diversion or water harvesting services in any of its irrigation schemes.

[159] Referral, para. B(1.1).
[160] Referral, section 1.
[161] Seqwater, sub. 1, pp. 59, 65.
[162] Referral, para. B(1.1)(a).

Seqwater draft recommendation 2

We recommend that:

- termination fees applicable to customers in the Morton Vale Pipeline distribution system should be calculated as up to 11 times (including GST) the fixed (Part C) price target
- termination fees applicable to the Pie Creek distribution system should be calculated as up to 11 times (including GST) the recommended fixed (Part C) price
- Seqwater should have the discretion to apply a lower multiple to the relevant fixed price or waive the termination fee
- Seqwater should never recover any revenue shortfall from remaining customers upon exit of the scheme by another customer.

10.2.1 Termination fees

Termination fees apply when distribution system WAEs are permanently transferred to a different section of the scheme.

The purpose of termination fees is to allow Seqwater to recover its fixed costs associated with permanently transferred WAEs and to protect remaining customers from any price increases as a result of the permanent transfer of WAEs.

Seqwater has proposed to continue with the current arrangements for termination fees for the next price path period. In line with this approach, Seqwater proposed that:

- for the Morton Vale Pipeline scheme, the termination fee should be 11 times the cost-reflective Part C price
- for the Pie Creek scheme, the termination fee should be 11 times the recommended Part C price.

Under this approach, the government provides a community service obligation (CSO) for terminations in Pie Creek.[163]

In the 2020 review, we recommended that the termination fee should be a multiple of 11 times (including GST) the relevant fixed cost-reflective price for the Morton Vale Pipeline scheme and 11 times (including GST) the recommended (not cost-reflective) fixed price for the Pie Creek scheme. The multiple to be applied was based on ACCC guidelines for the Murray-Darling Basin (MDB) initially issued in 2011, and subsequently updated in 2020.[164] The ACCC considered that the imposition of a termination fee ensures a contribution from exiting irrigators for the ongoing fixed costs of operating the infrastructure, providing some revenue certainty for infrastructure operators and some protection against future price increase for remaining customers.[165]

[163] Seqwater, sub. 1, p. 65.
[164] QCA, *Rural Irrigation Price Review 2020-24, Part C: Seqwater*, final report, January 2020, pp. 69-72. The ACCC completed a review of the water charge rules for the MDB in 2016. Following this review, termination fees rules are contained in Part 10 of the Water Charge Rules 2010. ACCC, *Review of the Water Charge Rules*, final advice, September 2016, p. 271.
[165] The ACCC also considered that the maximum termination fee should only include fixed infrastructure charges imposed per unit of water delivery right held. ACCC, *Review of the Water Charge Rules*, final advice September 2016, pp. 14, 263.

We consider that the approach to calculating termination fees proposed by Seqwater is appropriate. It is consistent with our recommended approach in the 2020 review and reflects the current ACCC guidelines on the appropriate multiple to apply in calculating termination fees. Stakeholders have not commented on this issue.

We therefore recommend that for the Morton Vale Pipeline scheme, the termination fee should be calculated as up to 11 times (including GST) the fixed (Part C) price target.[166] This should be calculated using 5,051 ML WAEs, as this was the agreed volume at the establishment of the scheme.

For the Pie Creek scheme, we consider that the termination fee should continue to be calculated as up to 11 times (including GST) the recommended Part C price (not the price target). We recommended this approach in the 2020 review because basing the multiple on the cost-reflective price would result in a disproportionately high termination fee for Pie Creek compared to other schemes. We also noted that this may have implications for any CSO payment from the government to offset the cost impact on remaining users. Seqwater has not proposed any change to the termination fee arrangements, and stakeholders have not commented on this matter. In these circumstances, we consider it is appropriate to continue to apply the existing approach to calculating termination fees for the Pie Creek scheme.

We note that a lower multiple could be applied at Seqwater's discretion. Under our recommended approach, any revenue shortfall in termination fees should not be recovered from remaining customers. We consider that our recommended approach appropriately balances the interests of the terminating customer, remaining customers and Seqwater.

Table 33 sets out the maximum termination fees for each tariff group.

Table 33: Maximum termination fees for each tariff group ($/ML WAE, nominal)

Tariff group	2025–26	2026–27	2027–28	2028–29
Morton Vale Pipeline	180.88	185.49	190.22	195.07
Pie Creek	641.63	687.38	735.04	784.68

Source: QCA analysis.

[166] The ACCC recommended that termination fees be based on actual fixed prices, reflecting the fact that most operators in the MDB have historically set fixed prices below fixed costs. The ACCC considered that by setting the termination fee based on actual fixed prices, operators would have an incentive to move towards cost-reflective prices. However, Seqwater does not have the discretion to alter its tariff structure or set prices to cost-reflective levels.

11 Impact of draft prices

This chapter discusses the impacts of our draft price recommendations on irrigation customers and estimates the revenue shortfall for each tariff group with draft prices below the draft price target. More detailed information at the scheme and tariff level is provided in scheme information sheets, which are available on our website.

11.1 Indicative price impacts

We reached our draft price recommendations by applying the government's pricing principles.[167] For each tariff group, we compared our draft price recommendations (Appendix E) with the draft price target (Appendix D) over the price path period. Overall, three of Seqwater's nine tariff groups will have prices at the price target in the first year of the price path period, with no further tariff groups reaching the price target by the end of the price path period.

Based on our draft price recommendations, price increases would vary over the price path period for each tariff group and between tariff groups (Figure 8). Our analysis is based on the total price per megalitre (ML) of water access entitlement (WAE) for each tariff group. This is derived as the total fixed price plus the total volumetric price multiplied by the assumed scheme usage percentage of WAE (see Chapter 8). As a result, the price increases for individual customers will vary if their water usage differs from the assumed scheme usage.

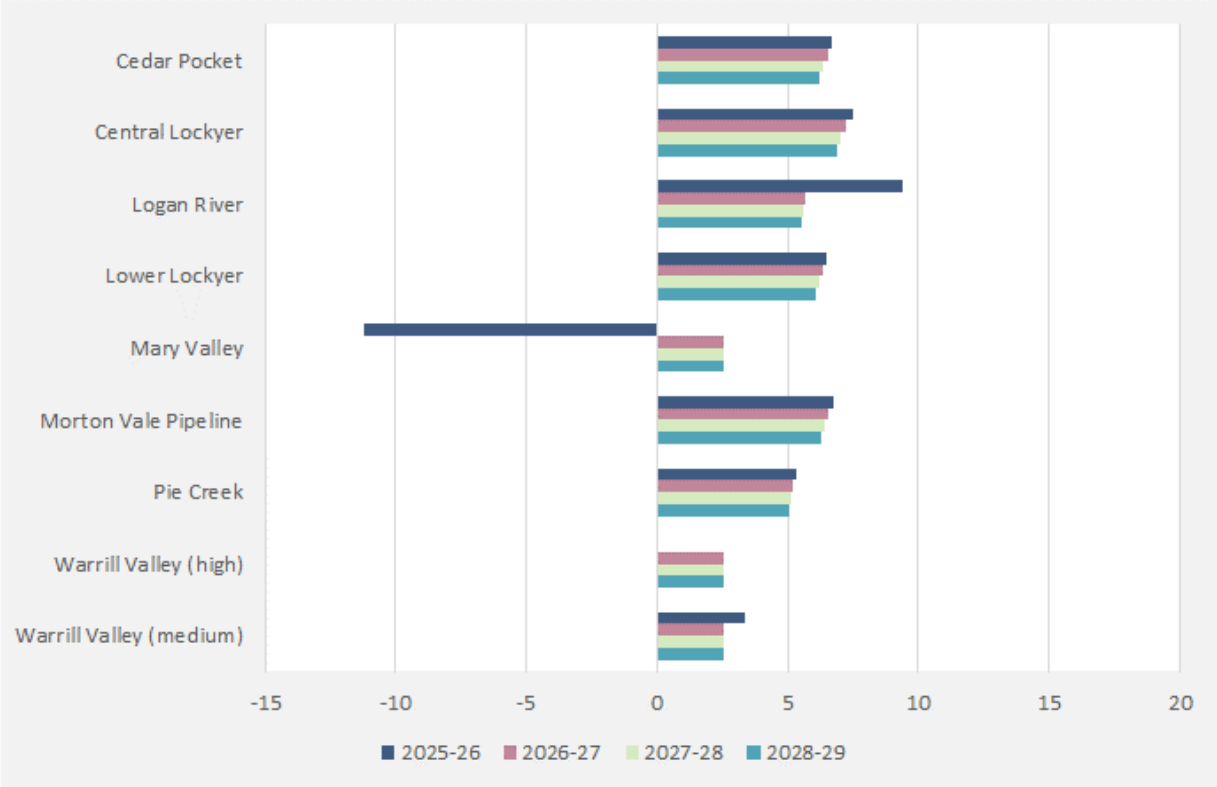
In 2025–26, a key driver of the difference in price changes between tariff groups is whether the fixed and volumetric components of the 2024–25 price are above or below the corresponding tariff components of the 2025–26 price target. Any components that are above will immediately reduce to the price target, and any components that are below will increase by no more than inflation plus $2.54/ML (2024–25 dollars) towards the price target.

In addition to this driver, price changes in 2025–26 and price increases for the remainder of the price path period will depend on:

- whether the tariff group is transitioning to the price target or is at the price target – all else being equal, tariff groups that are transitioning to the price target would generally face larger price increases (i.e. increases above forecast inflation) than customers that have reached the price target (i.e. increases by forecast inflation only)
- the relative level of the price in the previous year – if a tariff group is transitioning to the price target, an increase of inflation plus $2.54/ML (2024–25 dollars) applied to a relatively low price would result in a larger percentage increase than if it were applied to a relatively high price.

[167] With the exception of the Warrill Valley (high priority) tariff group (see section 10.1.1).

Figure 8: Changes in draft irrigation prices, bulk and distribution tariff groups (nominal, % change)



Notes: The base year price is the 2024–25 irrigation price before the 15% discount that Seqwater was directed to apply to irrigation prices. Since Warrill Valley (high priority) is a new tariff group, there is no price change in 2025–26.

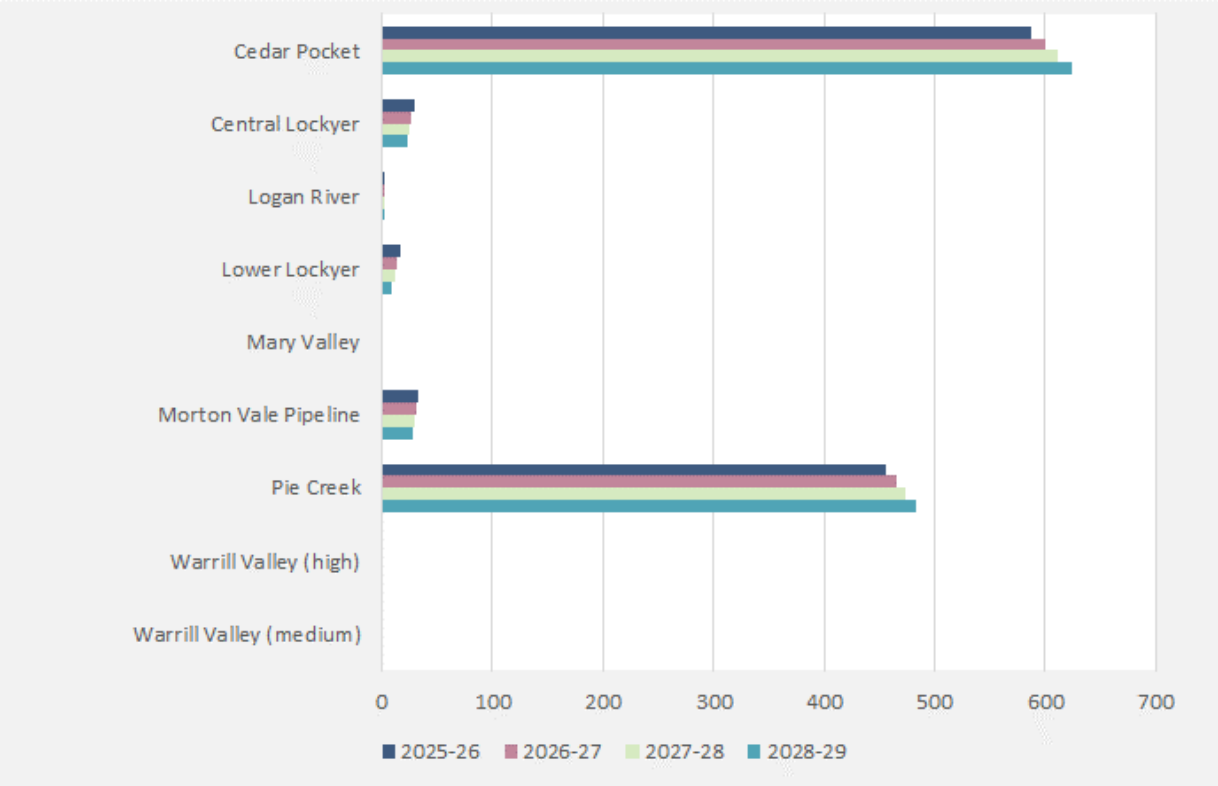
The government provides a CSO payment to Seqwater when prices are below the price target. Based on our draft price recommendations and draft price targets, we estimated the revenue shortfall per megalitre of WAE for each tariff group over the price path period (Figure 9).[168] The estimated revenue shortfall:

- is highest for those tariff groups that are the furthest from the price target
- decreases over the period as prices move closer to the price target or reach the price target (in which case the shortfall become zero), except for the Cedar Pocket water supply scheme and the Pie Creek distribution system, where the shortfall increases.[169]

[168] The estimated shortfall does not cover the allowances for a return on (and of) dam safety upgrade capex and assets built before 1 July 2000, because these allowances are excluded from the costs that are allowed to be recovered through the price target.

[169] The shortfall increases for these two schemes because the annual increases in the draft price targets (which are significantly higher than draft prices in these two schemes) are greater in dollars per ML terms than the annual increases in draft prices.

Figure 9: Estimated revenue shortfall, bulk and distribution tariff groups ($/ML, nominal)



Note: The annual revenue shortfall per ML of WAE for each tariff group is calculated as the difference between the draft recommended price and draft price target, with the volumetric price component multiplied by the assumed scheme usage for volumetric prices.

11.2 Stakeholders raised concerns about affordability

We acknowledge the concerns raised by several stakeholders about the affordability of irrigation prices and the broader impact on business viability and regional development.[170]

In determining irrigation prices, the government says that it is seeking to strike a balance between cost recovery, customer impacts, and simple and transparent pricing.[171] Previous statements by the government also suggest that its irrigation pricing policy and pricing decisions have been informed by considerations of affordability, capacity to pay and minimisation of price shocks.[172]

To assist the government with its pricing decisions, we were directed to recommend prices that are consistent with the government's pricing principles.[173] The pricing principles set out how prices should transition to the price target and how the price target should increase over the price path period. The benefits to customers of prices set according to the pricing principles include:

- protection from large cost increases, because of the cap on annual price increases

[170] Canegrowers Mackay, sub. 45, pp. 1–3; QFF, sub. 59, pp. 5–7; Australian Cane Farmers Association Limited and Queensland Cane Agriculture and Renewables, sub. 58, pp. 5-7, Attachment 1; BRIA Irrigators, sub. 42, p. 6; Central Highlands Cotton Growers and Irrigators Association, sub. 47, p. 2; Nogoa-Mackenzie IAC, sub. 57, p. 1; Barker Barambah IAC, sub. 40, p. 1; B Nicholson, sub. 56, p. 3.

[171] Queensland Government, *Seqwater and Sunwater irrigation pricing*, Business Queensland website, accessed 8 May 2024.

[172] Queensland Government, *Gazette: Extraordinary*, vol. 384, no. 5, 5 May 2020, pp. 25–30; A Lynham (Minister for Natural Resources, Mines and Energy), *Price freeze offers further relief for farmers*, media statement, Queensland Government, 5 May 2020; Queensland Government, *Submission to the Productivity Commission* [sub 45], National Water Reform issues paper – March 2017, 21 April 2017, p. 7.

[173] There are a few exceptions to the requirement to apply the transitional element of the pricing principles.

- for many customers (in six of Seqwater's nine tariff groups), prices that are below the price target for some or all of the price path period
- for customers at the price target, prices that are below the full costs of supplying irrigation services.[174]

In addition, while the government considers our price recommendations, it is not bound to accept them. For the current price path period, the government set prices that were lower than the prices we recommended in our 2020 review (see Appendix A). The government decided to provide additional price relief given concerns about the ability of irrigation customers to withstand price increases due to the impacts of the covid-19 pandemic, drought and broader economic conditions.[175]

We have limited scope to directly consider or address affordability concerns, given the bounds within which we are to provide our price recommendations. In addition, delivering support through lower prices is generally an inefficient and ineffective way of improving affordability, because the support cannot be targeted to that most need it, consumption and investment decisions may be distorted, and the costs to the broader community may be higher than necessary.

However, our price recommendations may indirectly affect affordability because we ensure that only prudent and efficient costs are recovered through the price target. When setting the price target, we also have some scope to consider accommodating customer preferences to mitigate price impacts, such as accepting lower service standards to reduce costs, or changing the proportion of costs allocated to each of the tariff components. However, we would need to consider those preferences alongside other relevant matters, such as:

- impacts on economic efficiency – for example, whether there is any inefficient cost shifting to other customers or distortions to price signals
- impacts on the revenue shortfall – whether there would be an increase in the revenue shortfall (i.e. the difference between the revenue recovered from irrigation prices and the revenue that would be recovered if the price target was charged), which may occur because of the way the pricing principles operate.

Stakeholders in some schemes were concerned about the impact of poor scheme reliability on the ability of customers to pay fixed charges when there is little or no water available.[176] When water allocations are low, customers will pay more for each ML of water they take. In schemes that have lower reliability, one option might be to increase the allocation of costs to the volumetric charge when setting the price target. In assessing the appropriateness of such an approach, we would also need to consider:

- the implications on Seqwater's risk profile and whether Seqwater needed to be compensated for accepting additional revenue risk
- the impact on the efficiency of price signals
- the requirement in the referral to consider the fixed and variable nature of costs in relation to tariff structures
- whether there would be an increase in the revenue shortfall.

[174] The price target recovers allowable costs, which exclude certain costs, such as a return on and of both the initial investment in existing assets (as at 1 July 2000) and dam safety upgrade capex.

[175] Queensland Government, *Gazette: Extraordinary*, vol. 384, no. 5, 5 May 2020, p. 28; A Lynham (Minister for Natural Resources, Mines and Energy), *Price freeze offers further relief for farmers*, media statement, Queensland Government, 5 May 2020.

[176] The Lockyer Water Users Forum also said that assets may be stranded without an alternative pricing policy for underperforming assets. See Lockyer Water Users Forum, sub. 52, pp. 1–3; Murgon and Gatton workshop summaries at QCA, *Irrigation price investigation 2025–29*, QCA website.

However, the suggestion by the Lockyer Water Users Forum that we recommend waiving fixed charges when no water is available[177] would be inconsistent with the pricing principles. We also consider that this is a matter for the government to consider, as we have not been asked to advise on policy matters.

We note that other support measures may be available to customers who require additional financial assistance. For instance:

- Seqwater can offer payment arrangements, such as payment extensions or instalment plans to smooth payments over a longer period.[178]
- The Farm Management Deposit Scheme aims to help primary producers to deal with fluctuations in cashflow by setting aside pre-tax income that can be drawn on in future years when it is needed.[179]
- The Queensland Rural and Industry Development Authority delivers government financial assistance programs to primary producers, such as loans, grants and rebates. This includes drought and disaster assistance programs, loans to improve business sustainability, and support to producers facing financial difficulties.[180]

It is a matter for the government to decide whether to further subsidise irrigation prices or to provide additional external support to address affordability concerns or meet other policy objectives.

[177] Lockyer Water Users Forum, sub. 52, pp. 1–3.
[178] Seqwater, *Fees and charges schedule: 1 July 2023 to 30 June 2024*, n.d., p. 2.
[179] Australian Government Department of Agriculture, Fisheries and Forestry (DAFF), *Farm Management Deposits*, DAFF website, accessed 8 May 2024; Australian Taxation Office (ATO), *Farm management deposits*, ATO website, accessed 8 May 2024.
[180] See www.qrida.qld.gov.au

12 Managing cost risk

In this chapter, we explain our draft recommendations on appropriate price review triggers and other mechanisms to manage the risks associated with material changes in allowable costs outside Seqwater's control.[181]

12.1 Key findings

We propose to maintain the review event mechanism to address uncontrollable opex risk. Of the current list of review events, we propose to maintain the government policy review event but to remove the off-stream pumping, insurance, and electricity review events. We also propose to clarify the government policy review event definition and the criteria for assessing review event applications.

We propose to maintain the current approach of undertaking an ex post true-up of renewals and other capex, subject to an assessment of those costs for prudency and efficiency.

Seqwater draft recommendation 3

We recommend the following mechanisms to manage Seqwater's uncontrollable cost risk over the price path period:

- a review event mechanism for opex risk that provides for an adjustment to allowable costs if:
  - the following event occurs during the price path period:
    - an increase or decrease in costs caused by a change in government policy or regulatory requirement
  - the following criteria are met:
    - the event results in a change in total costs that is sufficiently material that it could not reasonably be met by an efficient business operating within business-as-usual budget constraints, through prudent reprioritisation of expenditure
    - the costs of the event are prudent and efficient
    - an adjustment has been made to the costs of the event for any factors that offset those costs
- an end-of-period true-up for prudent and efficient renewals and other capex.

12.2 Opex risk

We generally expect Seqwater to operate within its overall opex allowance and to manage variations in opex over the price path period. However, we acknowledge that events may occur

[181] Referral, para. B(1.1)(b).

during the period that are outside Seqwater's control, and those events may have a material impact on Seqwater's costs that it is unable to manage within its overall allowance.

In the 2020 review, we recommended addressing uncontrollable opex risk through a review event mechanism.[182] The government accepted our recommendation.[183] Under the review event mechanism, an adjustment is made to Seqwater's opex allowance to reflect a material change in costs caused by the occurrence of specified review events, if the change in costs is prudent and efficient. Our assessment of Seqwater's proposal to recover review event costs in the current price path period is provided in Chapter 4.

We consider that the review event mechanism should continue to apply because it provides a reasonable balance between:

- allocating most opex risk to the business, including responsibility for managing variations in costs and re-prioritising expenditure within the opex allowance, to incentivise the business to efficiently manage risk and pursue efficiency gains
- allocating opex risk associated with a limited number of review events to customers and the government (if customers are paying transitional prices), to provide a reasonable opportunity for the business to recover its efficiently incurred costs and maintain an appropriate level of service.

Seqwater proposed to retain the off-stream pumping review event, but it did not propose any other review events.[184]

12.2.1 Off-stream pumping review event

Seqwater proposed to retain the off-stream pumping cost review event for the Central Lockyer Valley scheme. Electricity costs in this scheme can vary significantly over the period, mainly driven by the need to pump water to the Lake Clarendon off-stream storage site during high flow events and then to pump the water out for later usage.

In the 2020 review, we found that it was difficult to predict high flow events. As a result, we did not provide an allowance for off-stream pumping costs and instead treated these costs as a review event. However, we now have a longer time series of electricity costs for the scheme, which shows that costs were around $150,000 for one year in each of the last two price path periods (with the other years below $50,000 per year). It also shows that the 5-year and 10-year cost averages were around $44,000 per year (2022–23 dollars).

This longer time series of historic electricity costs makes it possible to forecast electricity costs for the Central Lockyer Valley scheme with greater accuracy. We propose to base our cost forecast on the long-term average of electricity costs (see Chapter 4) and to remove the review event. By providing an upfront allowance for off-stream pumping costs, we expect that Seqwater will be able manage cost variations over the period within its overall opex allowance.

12.2.2 Insurance review event

The review event would allow a true-up for the difference between actual insurance premiums and forecast insurance premiums included in Seqwater's opex allowance, if the change in premiums is material. Unlike Sunwater, Seqwater did not propose to retain this review event.

[182] QCA, *Rural irrigation price review 2020–24, Part A: Overview*, final report, January 2020, p. 43.
[183] Referral, para. B(1.1)(a); Queensland Government, *Gazette: Extraordinary*, vol. 384, no. 5, 5 May 2020, p. 26.
[184] Seqwater, sub. 3, p. 13.

Seqwater has some control over insurance premiums, although premiums are also affected by external risk factors that are outside Seqwater's control, and we acknowledge the difficulty of forecasting premiums in the current environment. However, Seqwater proposed a higher escalation rate for insurance premiums than Sunwater, which we have accepted (see Chapter 4). Seqwater also demonstrated its ability to manage insurance cost variations in the current price path period, without requiring a review event adjustment. Taking these factors into account, we consider that it is appropriate for Seqwater to manage insurance cost risk.

Our draft recommendation is that the insurance review event should not be retained.

12.2.3 Other review events

In relation to other review events that apply in the current period, our draft recommendation is that:

- the electricity review event should not be retained — Seqwater's electricity costs are relatively minor, and variations in electricity costs should be manageable by Seqwater within its overall opex allowance
- the policy change/regional impost review event should be retained, because Seqwater has limited control over the events occurring or the resultant cost impact. However, we consider the definition should be clarified to capture changes in regulatory requirements, rather than being limited to regulatory imposts.

We have not identified other opex risks outside Seqwater's control that would justify the inclusion of additional review events.

12.2.4 Assessing review event applications

We propose to clarify the criteria that would apply to the assessment of review event applications. We consider that an adjustment to allowable costs should only be made if the definition of a specified event is met and the following criteria are satisfied:

- The event results in a change in total costs that is sufficiently material that it could not reasonably be met by an efficient business operating within business-as-usual budget constraints, through prudent reprioritisation of expenditure.
- The costs of the event are prudent and efficient.
- An adjustment has been made to the cost of the event for any factors that offset those costs.

12.2.5 Timing of review event assessments

If a review event occurs during the price path period, an adjustment to reflect the change in costs could either be made during the period or at the end of the period. However, we could not undertake a mid-period review unless we were directed to do so by the government.

A within-period review could introduce price volatility and may be inconsistent with the government's pricing principles, which define how prices are to increase over the price path period.[185] An end-of-period adjustment may therefore be more appropriate.

However, Seqwater could approach the government to propose a mid-period review, if it considered that it was unable to manage cost increases until the next price path period. Proposals

[185] QFF (sub. 59, pp. 4–5) was opposed to within-period reviews.

could be considered on a case-by-case basis, and it would be open to the government to obtain our advice to inform the assessment.

12.3 Renewals expenditure risk

When we determine the allowance for renewals expenditure for the upcoming price path period, we are required to adjust the allowance to reflect prudent and efficient renewals expenditure incurred in previous periods (see Chapter 5).[186]

Allocating renewals expenditure risk to Seqwater may encourage it to become more efficient. It would also balance incentives for efficient opex with incentives for efficient renewals to avoid inefficient substitution between opex and renewals.

However, it is more difficult to forecast renewals expenditure accurately than to forecast recurrent opex because Seqwater's renewals expenditure is generally lumpy and non-recurrent. Further, allocating renewals risk to Seqwater may encourage the inefficient deferral of spending to future periods, or a reduction in spending that would otherwise be efficient, which may adversely affect service provision.

It can be difficult to distinguish between underspending due to genuine improvements in efficiency and underspending due to the inefficient deferral of expenditure. The risk of forecasting error could also require larger contingencies to be built into cost forecasts, which may result in price targets that are higher than necessary.

In the 2022 bulk water review, we considered there were opportunities to improve the assessment and incentive frameworks for capex, such as considering the potential role of ex post assessments and capital efficiency sharing mechanisms.[187] There are costs and benefits of allocating renewals risk to Seqwater. However, given that the supply of irrigation services is integrated with the supply of bulk water services and that irrigation makes up a small part of Seqwater's overall business, any consideration of changes to the allocation of risk or the role of ex post assessments should be driven by a broader review of Seqwater's bulk water services, rather than being undertaken in isolation.

Our draft recommendation is to maintain the current approach of adjusting forecast renewals and other capex for actual costs, subject to an ex post assessment for prudency and efficiency.

[186] Referral, para. B(1.1)(a).
[187] QCA, *Seqwater Bulk Water Price Review 2022–26*, final report, March 2022, p. 53.

Appendix A: Background on irrigation pricing

The government considers our recommendations when making decisions about the irrigation prices that the businesses can charge.

In this appendix, we provide an overview of our price recommendations from the 2020 review, the government's consideration of our recommendations and its subsequent decision about the prices to apply in the current price path period.

A.1 Price recommendations from our 2020 review

Our previous review recommended prices for the period 1 July 2020 to 30 June 2024.[188] In accordance with the pricing principles specified in the referral, we recommended that the fixed and volumetric components of a customer's prevailing price transition towards a price that recovers allowable costs (the price target) in the following way:

- fixed prices – annual increases of inflation plus an additional component of $2.38 per megalitre (ML) of water access entitlement (from 2020–21, increasing by inflation) where the prevailing total fixed price was below the associated component of the price target[189]; no change in the total fixed price where the prevailing total fixed price was above the associated component of the price target[190]
- volumetric prices – annual increases by no more than inflation plus $2.38/ML (from 2020–21, increasing by inflation) where the prevailing volumetric price was below the associated component of the price target, and move straight to the price target where the prevailing volumetric price was above the associated component of the price target.[191]

The government did not accept our price recommendations (except for our recommendations on miscellaneous prices), but it did set prices that were based on our recommendations, as discussed below.[192] We made other recommendations that were accepted, including recommendations on apportioning dam safety upgrade capex, addressing risks and improving customer engagement.

A.2 Prices in the current price path period

The government determined prices for each year of the current price path period that were lower than the prices we recommended:[193]

- For 2020–21, prices were maintained at 2019–20 levels[194], as part of a broader package of measures to support businesses through the covid-19 pandemic. The government also said

[188] QCA, *Irrigation price investigation 2020-24*, final report, January 2020.
[189] The required increase was applied firstly to the bulk fixed price (Part A).
[190] For distribution systems, the prevailing bulk fixed price (Part A) was reduced to the associated component of the price target where the prevailing bulk fixed prices was above the associated component of the price target.
[191] In accordance with the government's pricing principles, once a fixed or volumetric price reached the associated component of the price target, we recommended that the relevant component of the price target applies.
[192] Queensland Government, *Gazette: Extraordinary*, vol. 384, no. 5, 5 May 2020, pp. 25–30.
[193] Note that we were not directed to recommend prices for the last year of the period (i.e. 2024-25).
[194] Unless the fixed or volumetric price we recommended for 2020–21 was lower, in which case customers were to pay the lower price.

its decision had been informed by the impacts of drought and broader economic conditions on the ability of customers to withstand price increases.[195]

- From 2021–22 to 2024–25, prices in each year generally reflect the prices we recommended for the previous year.[196] Sunwater and Seqwater were then directed to apply a 15% discount to those prices. Customers growing horticulture crops (such as fruit, vegetables, nuts and turf) received an additional 35% discount (giving a total discount of 50%) until the end of 2023–24.[197] The decision to discount prices was described by the government as an important measure to support Queensland's economic recovery from the covid-19 pandemic.[198]

Reflecting customer affordability concerns, the government also decided to subsidise dam safety upgrade capex, instead of including those costs in the price target.[199]

[195] Queensland Government, *Gazette: Extraordinary*, vol. 384, no. 5, 5 May 2020, p. 28; A Lynham (Minister for Natural Resources, Mines and Energy), *Price freeze offers further relief for farmers*, media statement, Queensland Government, 5 May 2020.

[196] Unless our recommended 2023–24 fixed price was higher than the associated component of the price target, in which case the 2023–24 fixed price (before discount) was to reflect the associated component of the price target. In these cases, the 2024–25 fixed price was derived by applying inflation to the 2023–24 fixed price.

[197] The additional 35% discount was to be paid to eligible customers as a rebate (Queensland Rural and Industry Development Authority (QRIDA), *Horticulture Irrigation Pricing Rebate Scheme*, QRIDA website, 2023, Queensland Government, accessed 3 June 2024).

[198] Queensland Government, *Progress report on 2020 government election commitments*, September 2021, pp. 123–124; G Butcher (Minister for Regional Development and Manufacturing and Minister for Water), *Next steps to slashing irrigation prices unveiled*, media statement, Queensland Government, 13 May 2021.

[199] Queensland Government, *Gazette: Extraordinary*, vol. 384, no. 5, 5 May 2020, pp. 25–30.

Appendix B: Stakeholder consultation

B.1 Stakeholder workshops

We held 11 stakeholder workshops in early 2024. A summary of the issues raised at each workshop is available on our website.

Date	Location	Schemes covered	Number of attendees[a]
23 January	Gatton	Central Lockyer, Lower Lockyer (Seqwater)	4
25 January	Pittsworth	Upper Condamine, Chinchilla Weir, Dawson Valley (Sunwater)	5
31 January	Mareeba	Mareeba-Dimbulah (Sunwater)	4
6 February	Bundaberg	Bundaberg (Sunwater)	8
7 February	Monto	Upper Burnett, Three Moon Creek (Sunwater)	5
8 February	Emerald	Nogoa-Mackenzie (Sunwater)	13
9 February	Mackay	Pioneer River, Proserpine River, Eton (Sunwater)	12
12 February	Murgon	Barker-Barambah, Upper Burnett (Sunwater)	6
13 February	Online	All Sunwater schemes	15
14 February	Clare	Burdekin-Haughton (Sunwater)	16
14 February	Giru	Burdekin-Haughton (Sunwater)	27
Total			**115**

a Excluding QCA, Sunwater and Seqwater staff.

B.2 List of submissions

The submission we received are listed below. They are numbered for reference purposes only – the numbers are used in the footnotes in the report. The submissions are available on our website.

Stakeholder	Submission number	Type of submission	Date
Seqwater	1	Seqwater proposal	November 2023
	2	Appendix A – Cedar Pocket WSS	November 2023
	3	Appendix B – Central Lockyer Valley incl Morton Vale Pipeline WSS	November 2023
	4	Appendix C – Lower Lockyer Valley WSS	November 2023
	5	Appendix D – Logan River WSS	November 2023
	6	Appendix E – Mary Valley WSS	November 2023
	7	Appendix F – Warrill Valley WSS	November 2023
	8	Appendix G – Badu – HUF Report	November 2023

Stakeholder	Submission number	Type of submission	Date
Sunwater	9	Sunwater proposal	November 2023
	10	Appendix A – Proposed and recommended prices under an annuity methodology	November 2023
	11	Appendix B – Customer engagement report	November 2023
	12	Appendix C – Cost escalation paper	November 2023
	13	Appendix D – Demand report	November 2023
	14	Appendix E – Headworks utilisation factor technical paper	November 2023
	15	Appendix F – Electricity costs technical paper	November 2023
	16	Appendix G – Strategic asset management plan	November 2023
	17	Appendix H – Weighted average cost of capital review	November 2023
	18	Scheme summary – Barker Barambah WSS	November 2023
	19	Scheme summary – Bowen Broken Rivers WSS	November 2023
	20	Scheme summary – Boyne River and Tarong WSS	November 2023
	21	Scheme summary – Bundaberg WSS	November 2023
	22	Scheme summary – Burdekin-Haughton	November 2023
	23	Scheme summary – Callide Valley WSS	November 2023
	24	Scheme summary – Chinchilla Weir WSS	November 2023
	25	Scheme summary – Cunnamulla WSS	November 2023
	26	Scheme summary – Dawson WSS	November 2023
	27	Scheme summary – Eton WSS	November 2023
	28	Scheme summary – Lower Fitzroy WSS	November 2023
	29	Scheme summary – Lower Mary WSS	November 2023
	30	Scheme summary – Macintyre Brook WSS	November 2023
	31	Scheme summary – Maranoa WSS	November 2023
	32	Scheme summary – Mareeba-Dimbulah WSS	November 2023

Stakeholder	Submission number	Type of submission	Date
	33	Scheme summary – Nogoa Mackenzie WSS	November 2023
	34	Scheme summary – Pioneer River WSS	November 2023
	35	Scheme summary – Proserpine River WSS	November 2023
	36	Scheme summary – St George WSS	November 2023
	37	Scheme summary – Three Moon Creek WSS	November 2023
	38	Scheme summary – Upper Burnett WSS	November 2023
	39	Scheme summary – Upper Condamine WSS	November 2023
	63	Brief supplementary submission in response to stakeholder submissions to the QCA	May 2024
Barker Barambah IAC	40	Submission on Sunwater's proposal	February 2024
Bundaberg Regional Irrigators Group (BRIG)	41	Submission on Sunwater's proposal	February 2024
Burdekin River Irrigation Area (BRIA) Irrigators Limited	42	Submission on Sunwater's proposal	February 2024
Canegrowers	43	Submission on Sunwater's proposal	February 2024
Canegrowers Burdekin	44	Submission on Sunwater's proposal	February 2024
Canegrowers Mackay	45	Submission on Sunwater's proposal	February 2024
Central Downs Irrigators	46	Submission on Sunwater's proposal	February 2024
Central Highlands Cotton Growers and Irrigators Association (CHCGIA)	47	Submission on Sunwater's proposal	February 2024
Cotton Australia	48	Submission on Sunwater's proposal	February 2024
Eton Irrigation Cooperative Ltd (EICL)	49	Submission on Sunwater's proposal	February 2024

Stakeholder	Submission number	Type of submission	Date
Fairbairn Irrigation Network	50	Submission on Sunwater's proposal	February 2024
Giru Benefited Area Committee	51	Submission on Sunwater's proposal	February 2024
Lockyer Water Users Forum	52	Submission on Seqwater's proposal	February 2024
Lower Burdekin Riparian Growers	53	Submission on Sunwater's proposal	February 2024
Lower Burdekin Water	54	Submission on Sunwater's proposal	February 2024
Mallawa Irrigation	55	Submission on Sunwater's proposal	February 2024
Nicholson, B	56	Submission on Sunwater's proposal	February 2024
Nogoa-Mackenzie IAC	57	Submission on Sunwater's proposal	February 2024
Queensland Cane Agriculture and Renewables (QCAR), Australian Cane Farmers Association Limited (ACFA) Limited and AgForce Cane Board Limited (ACL)	58	Submission on Sunwater's proposal	February 2024
Queensland Farmers' Federation (QFF)	59	Submission on Sunwater's and Seqwater's proposal	February 2024
Sippel, D and S	60	Submission on Sunwater's proposal	February 2024
Theodore Water	61	Submission on Sunwater's proposal	February 2024
Wilmar Sugar Australia	62	Submission on Sunwater's proposal	February 2024

Appendix C: Draft costs by scheme

Cedar Pocket WSS

Table 34: Total allowable costs, Cedar Pocket WSS ($'000, nominal)

Cost	2025-26	2026-27	2027-28	2028-29
Labour	87.7	90.7	93.0	95.3
Electricity	0.4	0.4	0.5	0.5
Repairs and maintenance	13.7	14.1	14.5	14.8
Other	99.0	58.5	57.2	61.5
Insurance	14.0	14.7	15.5	16.3
Non-direct	61.0	62.6	64.2	65.8
Renewals annuity	(7.7)	(7.7)	(7.8)	(7.8)
Revenue offsets	(1.4)	(1.4)	(1.5)	(1.5)
Review events	87.1	89.3	91.6	93.9
QCA fee	0.3	0.3	0.3	0.3
Total costs	**354.2**	**321.6**	**327.4**	**339.0**

Notes: Totals may not add due to rounding. Total allowable costs include costs allocated to irrigation and non-irrigation customers.
Source: QCA analysis.

Central Lockyer Valley WSS

Table 35: Total allowable costs, Central Lockyer Valley WSS ($'000, nominal)

Cost	2025-26	2026-27	2027-28	2028-29
Labour	146.3	151.4	155.2	159.0
Electricity	51.0	52.1	53.3	54.6
Repairs and maintenance	184.4	190.1	194.8	199.7
Other	201.1	195.3	258.6	253.4
Insurance	219.2	230.2	241.7	253.8
Non-direct	275.8	282.9	290.0	297.3
Renewals annuity	414.2	420.6	427.1	433.7
Revenue offsets	(0.6)	(0.6)	(0.6)	(0.6)
Review events	49.5	50.8	52.1	53.4
QCA fee	7.9	8.1	8.3	8.5
Total costs	**1,548.7**	**1,580.8**	**1,680.5**	**1,712.8**

Notes: Totals may not add due to rounding. Total allowable costs include costs allocated to irrigation and non-irrigation customers.
Source: QCA analysis.

Morton Vale Pipeline distribution system

Table 36: Total allowable costs, Morton Vale Pipeline ($'000, nominal)

Cost	2025-26	2026-27	2027-28	2028-29
Labour	19.8	20.5	21.0	21.6
Electricity	–	–	–	–
Repairs and maintenance	10.4	10.7	11.0	11.2
Other	3.9	4.0	4.1	4.2
Insurance	17.9	18.8	19.7	20.7
Non-direct	18.1	18.6	19.0	19.5
Renewals annuity	5.2	6.4	7.5	8.8
Revenue offsets	(0.2)	(0.2)	(0.3)	(0.3)
QCA fee	1.9	1.9	2.0	2.0
Total costs	**76.9**	**80.6**	**84.1**	**87.7**

Notes: Totals may not add due to rounding. Total allowable costs include costs allocated to irrigation and non-irrigation customers.
Source: QCA analysis.

Logan River WSS

Table 37: Total allowable costs, Logan River WSS ($'000, nominal)

Cost	2025-26	2026-27	2027-28	2028-29
Labour	326.4	337.9	346.3	354.9
Electricity	11.3	11.6	11.8	12.1
Repairs and maintenance	357.0	368.1	377.3	386.7
Other	957.7	950.1	960.2	1,046.7
Insurance	526.7	553.0	580.7	609.7
Non-direct	719.8	738.2	756.9	775.9
Renewals annuity	303.1	305.5	307.8	310.2
Revenue offsets	(41.5)	(42.5)	(43.6)	(44.7)
QCA fee	6.8	7.0	7.1	7.3
Total costs	**3,167.3**	**3,228.8**	**3,304.6**	**3,458.8**

Notes: Totals may not add due to rounding. Total allowable costs include costs allocated to irrigation and non-irrigation customers.
Source: QCA analysis.

Lower Lockyer Valley WSS

Table 38: Total allowable costs, Lower Lockyer Valley WSS ($'000, nominal)

Cost	2025-26	2026-27	2027-28	2028-29
Labour	196.5	203.4	208.5	213.7
Electricity	12.0	12.3	12.6	12.9
Repairs and maintenance	112.5	116.0	118.9	121.9
Other	142.8	141.9	150.2	197.3
Insurance	94.9	99.6	104.6	109.8
Non-direct	191.3	196.2	201.2	206.2
Renewals annuity	199.3	206.1	213.1	220.3
Revenue offsets	(11.7)	(12.0)	(12.3)	(12.6)
QCA fee	6.0	6.1	6.3	6.5
Total costs	**943.6**	**969.6**	**1,003.0**	**1,075.9**

Notes: Totals may not add due to rounding. Total allowable costs include costs allocated to irrigation and non-irrigation customers.
Source: QCA analysis.

Mary Valley WSS

Table 39: Total allowable costs, Mary Valley WSS ($'000, nominal)

Cost	2025-26	2026-27	2027-28	2028-29
Labour	270.6	280.1	287.1	294.2
Electricity	16.4	16.7	17.1	17.5
Repairs and maintenance	81.9	84.4	86.5	88.7
Other	101.6	99.4	154.0	104.5
Insurance	167.4	175.7	184.5	193.7
Non-direct	216.7	222.3	227.9	233.6
Renewals annuity	271.4	277.3	283.4	289.6
Revenue offsets	(14.9)	(15.3)	(15.7)	(16.1)
QCA fee	8.8	9.0	9.3	9.5
Total costs	**1,119.8**	**1,149.7**	**1,234.1**	**1,215.2**

Notes: Totals may not add due to rounding. Total allowable costs include costs allocated to irrigation and non-irrigation customers.
Source: QCA analysis.

Pie Creek distribution system

Table 40: Total allowable costs, Pie Creek distribution system ($'000, nominal)

Cost	2025-26	2026-27	2027-28	2028-29
Labour	81.2	84.1	86.2	88.3
Electricity	15.2	15.6	16.0	16.3
Repairs and maintenance	104.6	107.9	110.6	113.3
Other	64.5	66.2	67.9	69.6
Insurance	16.3	17.1	18.0	18.9
Non-direct	94.6	97.0	99.5	102.0
Renewals annuity	64.6	65.1	65.6	66.0
Revenue offsets	(1.0)	(1.0)	(1.0)	(1.0)
QCA fee	0.4	0.4	0.4	0.5
Total costs	**440.6**	**452.4**	**463.0**	**473.8**

Notes: Totals may not add due to rounding. Total allowable costs include costs allocated to irrigation and non-irrigation customers.
Source: QCA analysis.

Warrill Valley WSS

Table 41: Total allowable costs, Warrill Valley WSS ($'000, nominal)

Cost	2025-26	2026-27	2027-28	2028-29
Labour	280.9	290.7	297.9	305.4
Electricity	5.7	5.8	5.9	6.1
Repairs and maintenance	157.8	162.7	166.8	171.0
Other	212.3	269.4	223.3	234.9
Insurance	73.6	77.3	81.2	85.2
Non-direct	254.1	260.6	267.2	273.9
Renewals annuity	361.3	368.4	375.7	383.2
Revenue offsets	(41.7)	(42.8)	(43.9)	(45.0)
QCA fee	10.8	11.1	11.3	11.6
Total costs	**1,314.7**	**1,403.1**	**1,385.5**	**1,426.2**

Notes: Totals may not add due to rounding. Total allowable costs include costs allocated to irrigation and non-irrigation customers.
Source: QCA analysis.

Appendix D: Draft price targets

D.1 Bulk water supply schemes

Table 42 below shows the 2024–25 price and our draft price targets for Seqwater's bulk schemes.

Table 42: Existing price and our draft price targets – bulk schemes ($/ML, nominal)

Tariff group	Price	2024–25 price	Draft price target			
			2025-26	2026-27	2027-28	2028-29
Cedar Pocket	Part A	34.61	601.25	616.59	632.31	648.43
	Part B	46.81	87.49	89.72	92.01	94.35
Central Lockyer Valley	Part A	48.88	79.78	81.81	83.90	86.04
	Part B	11.77	17.51	17.95	18.41	18.88
Logan River	Part A	20.53	22.39	22.96	23.55	24.15
	Part B	15.19	24.95	25.59	26.24	26.91
Lower Lockyer Valley	Part A	62.11	79.43	81.46	83.54	85.67
	Part B	28.19	51.96	53.28	54.64	56.04
Mary Valley	Part A	15.51	14.24	14.60	14.97	15.35
	Part B	8.72	6.42	6.58	6.75	6.92
Warrill Valley (medium priority)	Part A	20.56	21.12	21.66	22.22	22.78
	Part B	11.81	12.72	13.05	13.38	13.72
Warrill Valley (high priority)[a]	Part A	n.a.	138.51	142.04	145.66	149.38
	Part B	n.a.	12.72	13.05	13.38	13.72

a This is a new tariff group as there was no government determined price for 2024–25.
Source: QCA analysis.

D.2 Distribution systems

Table 43 below shows the 2024–25 price and our draft price targets for Seqwater's distribution systems.

Table 43: Existing price and our draft price targets – distribution systems ($/ML, nominal)

Tariff group	Price	2024–25 price	Draft price target			
			2025-26	2026-27	2027-28	2028-29
Morton Vale Pipeline	Part A	48.88	79.78	81.81	83.90	86.04
	Part B	8.57	17.51	17.95	18.41	18.88
	Part C	11.29	16.44	16.86	17.29	17.73
	Part D	8.03	12.15	12.46	12.78	13.10
	Fixed	**60.17**	**96.22**	**98.67**	**101.19**	**103.77**
	Volumetric	**16.60**	**29.66**	**30.41**	**31.19**	**31.98**
Pie Creek	Part A	15.17	14.24	14.60	14.97	15.35
	Part B	8.53	6.42	6.58	6.75	6.92
	Part C	54.34	463.76	475.59	487.71	500.15
	Part D	91.54	301.76	309.46	317.35	325.44
	Fixed	**69.51**	**478.00**	**490.19**	**502.68**	**515.50**
	Volumetric	**100.07**	**308.18**	**316.04**	**324.10**	**332.36**

Source: QCA analysis.

Appendix E: Draft prices

E.1 Bulk water supply schemes

Table 44 below shows the 2024–25 price and our draft prices for Seqwater's bulk schemes.

Table 44: Existing price and our draft recommended prices – bulk schemes ($/ML, nominal)

Tariff group	Price	2024-25 price	Draft prices			
			2025-26	2026-27	2027-28	2028-29
Cedar Pocket	Part A	34.61	38.10	41.74	45.54	49.51
	Part B	46.81	48.00	49.23	50.48	51.77
Central Lockyer Valley	Part A	48.88	52.73	56.75	60.93	65.30
	Part B	11.77	12.07	12.38	12.69	13.02
Logan River	Part A	20.53	22.39	22.96	23.55	24.15
	Part B	15.19	16.85	19.95	23.19	26.59
Lower Lockyer Valey	Part A	62.11	66.30	70.66	75.20	79.93
	Part B	28.19	28.91	29.65	30.40	31.18
Mary Valley	Part A	15.51	14.24	14.60	14.97	15.35
	Part B	8.72	6.42	6.58	6.75	6.92
Warrill Valley (medium priority)	Part A	20.56	21.12	21.66	22.22	22.78
	Part B	11.81	12.72	13.05	13.38	13.72
Warrill Valley (high priority)[a]	Part A	n.a.	138.51	142.04	145.66	149.38
	Part B	n.a.	12.72	13.05	13.38	13.72

a This is a new tariff group as there was no government determined price for 2024–25.
Source: QCA analysis.

E.2 Distribution systems

Table 45 below shows the 2024–25 price and our draft prices for Seqwater's distribution systems.

Table 45: Existing price and our draft recommended prices – distribution systems ($/ML, nominal)

Tariff group	Price	2024–25 price	Draft prices			
			2025-26	2026-27	2027-28	2028-29
Morton Vale Pipeline	Part A	48.88	52.73	56.75	60.93	65.30
	Part B	8.57	8.79	9.01	9.24	9.48
	Part C	11.29	11.58	11.87	12.18	12.48
	Part D	8.03	8.23	8.45	8.66	8.88
	Fixed	**60.17**	**64.31**	**68.62**	**73.11**	**77.78**
	Volumetric	**16.60**	**17.02**	**17.46**	**17.90**	**18.36**
Pie Creek	Part A	15.17	14.24	14.60	14.97	15.35
	Part B	8.53	6.42	6.58	6.75	6.92
	Part C	54.34	59.65	63.84	68.21	72.76
	Part D	91.54	96.20	98.66	101.17	103.75
	Fixed	**69.51**	**73.89**	**78.44**	**83.18**	**88.11**
	Volumetric	**100.07**	**102.62**	**105.24**	**107.92**	**110.67**

Source: QCA analysis.

Appendix F: Matters considered by the QCA

In this appendix, we explain how we have considered each of the matters we are required to consider in:

- section 26 of the QCA Act
- the referral (paragraph C), in accordance with section 24(1)(b) of the QCA Act.[200]

Relevant matter	QCA consideration
Economic efficiency matters	
The need for efficient resource allocation (QCA Act, s. 26(1)(a))	The price targets reflect our assessment of the prudent and efficient costs of supplying irrigation services for each tariff group (Chapter 9). If prices are set according to the price target, this would generally promote efficient consumption and investment decisions by customers and efficient investment by Seqwater. It may also promote the efficient trading of water access entitlements (WAEs). However, the efficiency benefits may not be realised because we recommend prices that reflect the government's pricing principles (Chapter 10), which means that many customers will pay prices that are below cost-reflective levels. As the under-recovered costs are covered by a community service obligation (CSO) payment to Seqwater, this may impose redistribution and efficiency costs on the broader economy.
The need to promote competition (QCA Act, s. 26(1)(b))	Competition would be promoted if prices were set according to the price targets (Chapter 9), because there would be an incentive for customers to trade WAEs to their highest value use. In addition, consistent with competitive neutrality principles, Seqwater should not have a competitive advantage over private sector firms due to government ownership. In accordance with these principles, we determine costs that reflect the tax obligations and rate of return of a benchmark efficient firm operating in the private sector (Chapters 6 and 7).
The cost of providing the goods or services in an efficient way, having regard to relevant interstate and international benchmarks (QCA Act, s. 26(1)(d)(i))	We assess Seqwater's proposed costs for prudency and efficiency. We have regard to benchmarking, where we consider this to be appropriate (Chapters 4 and 5). We also consider normalised weighted average cost of capital (WACC) outcomes (Chapter 6).
The standard of the goods or services, including quality, reliability and safety (QCA Act, s. 26(1)(d)(iii))	In assessing the prudency and efficiency of costs, we consider Seqwater's operating environment, regulatory obligations and agreements with customers about service quality (Chapters 4 and 5).

[200] We may also consider other matters (QCA Act, s. 26(3)).

The appropriate rate of return on assets (QCA Act, s. 26(1)(e))	We determine an appropriate rate of return by estimating the WACC, which is the rate of return on investment that compensates the benchmark efficient firm for the regulatory and commercial risks associated with providing access to the service (Chapter 6).
Considerations of demand management (QCA Act, s. 26(1)(h))	Higher volumetric prices provide a financial incentive for customers to reduce consumption. In determining the price target for each tariff group, we aim to broadly align the tariff structure with the cost structure by allocating fixed costs to the fixed tariff components and variable costs to the volumetric tariff components (Chapter 9). However, the application of the pricing principles may mean the volumetric prices we recommend are lower than the corresponding volumetric components of the price target (Chapter 10).
The need for pricing practices not to discourage socially desirable investment or innovation by government agencies and persons carrying on non-government business activities (QCA Act, s. 26(1)(j))	The price targets reflect our assessment of the prudent and efficient costs of supplying irrigation services for each tariff group (Chapter 9). If prices are set according to the price target, this would promote efficient investment by Seqwater. However, inefficient investment may be promoted because we recommend prices that reflect the pricing principles (Chapter 10).
The fixed and variable nature of the underlying costs in relation to tariff structures (QCA Act, s. 24(1)(b); referral, para. C(1.1)(a))	In determining the price target for each tariff group, we aim to broadly align the tariff structure with the cost structure by allocating fixed costs to the fixed tariff components and variable costs to the volumetric tariff components (Chapter 9). The application of the pricing principles may mean the fixed and volumetric prices we recommend are lower than the corresponding fixed and volumetric components of the price target (Chapter 10). The government provides a CSO payment to Seqwater when prices are below the price target.
Business/industry-specific matters	
The actual cost of providing the goods or services (QCA Act, s. 26(1)(d)(ii))	Our assessment of the prudency and efficiency of costs was informed by information on actual costs provided by Seqwater (Chapters 4 and 5).
The effect of inflation (QCA Act, s. 26(1)(f))	Inflation is an input to the calculations of forecast opex, the renewals allowance, the price targets and recommended prices. We explain our approach to estimating inflation in Chapter 6.
Legislation and government policies relating to occupational health and safety and industrial relations (QCA Act, s. 26(1)(l))	We expect the opex allowance we determine will provide Seqwater with sufficient revenue to satisfy obligations relating to occupational health and safety and industrial relations (Chapters 4 and 5).
Any directions given by the government to the government agency by which the monopoly business activity is carried on (QCA Act, s. 26(1)(n))	Where relevant to our assessment, we consider directions that are given by the government to Seqwater.

Where relevant, the findings of the QCA's review of Seqwater's bulk water prices for the 2022–26 period (QCA Act, s. 24(1)(b); referral, para. C(1.1)(d)).	Our assessment of the prudency and efficiency of allowable costs has considered the findings of our 2022 review of Seqwater's bulk water prices (see Chapters 4 and 5).
Customer/social impact matters	
The protection of consumers from abuses of monopoly power (QCA Act, s. 26(1)(c))	The price targets reflect our assessment of the prudent and efficient costs of supplying irrigation services for each tariff group (Chapter 9). This prevents Seqwater from earning excessive profits due to its monopoly position. Irrigation customers are further protected from the exercise of monopoly power because we recommend prices that reflect the pricing principles, which means that many customers would pay prices below the price target (Chapters 10 and 11).
Social welfare and equity considerations including community service obligations, the availability of goods and services to consumers and the social impact of pricing practices (QCA Act, s. 26(1)(i)) Economic and regional development issues, including employment and investment growth (QCA Act, s. 26(1)(m))	In accordance with the referral, our draft price recommendations are consistent with the pricing principles, which constrain annual price increases, whether customers are transitioning to the price target or at the price target. Many customers would pay prices below the price target (Chapters 9 and 10). The price targets are no higher than necessary to enable Seqwater to recover its prudent and efficient costs of supplying irrigation services over time. Our recommended irrigation prices, combined with CSO payments to make up the revenue shortfall, will provide Seqwater with sufficient revenue to continue to invest in providing irrigation services, which benefits irrigation customers and regional communities. In Chapter 11, we consider the impacts of our draft price recommendations on irrigation customers and the estimate of the revenue shortfall. We also discuss stakeholder concerns about the affordability of irrigation prices, and the broader impacts on business viability and regional development.
Customer agreements on costs and/or prices proposed by the businesses, where consistent with the requirements in the referral (QCA Act, s. 24(1)(b); referral, para. C(1.1)(c))	Our assessment of the prudency and efficiency of allowable costs has considered Seqwater's submission that each scheme-level customer reference group generally endorsed the proposed costs in its pricing proposal (Chapters 4 and 5).[201] In response to customers preferences in the Warrill Valley water supply scheme, Seqwater proposed a pricing approach that deviates from the pricing principles. While we considered that the proposal has some merit in terms of stabilising prices and responding to customer preferences, it is precluded by the terms of the referral (Chapter 9).
The need to, where possible, provide revenue and pricing outcomes that are both simple and transparent for customers	In accordance with the referral, our draft price recommendations are consistent with the pricing principles, which constrain annual price increases, whether customers are transitioning to the price target or at the price target (Chapters 9 and 10).

[201] Seqwater, sub. 1, p. 7.

(QCA Act, s. 24(1)(b); referral, para. C(1.1)(b)(ii))	Prices in all schemes reflect a simple fixed and volumetric tariff structure, which is well understood by customers (Chapter 9). We provide information to help customers understand the potential impacts of our draft price recommendations (Chapters 10 and 11, and the scheme information sheets available on our website).
Environmental obligations	
The impact on the environment of prices charged by the government agency or other person carrying on the monopoly business activity (QCA Act, s. 26(1)(g)).	Higher volumetric prices provide a financial incentive for customers to reduce consumption. We allow Seqwater to recover the prudent and efficient costs of meeting regulatory and legislative requirements, including those related to environmental obligations. For example, we allow Seqwater to recover costs that are necessary to meet its obligations under the water planning framework, which includes environmental management rules in the resource operations licence and environmental flow objectives in water plans (Chapters 4 and 5).
Legislation and government policies relating to ecologically sustainable development (QCA Act, s. 26(1)(k)).	
Other matters	
The need to balance the legitimate commercial interests of the businesses with the interests of their customers (QCA Act, s. 24(1)(b); referral, para. C(1.1)(b)(i)).	In accordance with the referral, our draft price recommendations are consistent with the pricing principles, which constrain annual price increases, whether customers are transitioning to the price target or at the price target (Chapters 9 and 10). We expect that Seqwater would recover sufficient revenue to recover its prudent and efficient allowable costs through a combination of irrigation prices and CSO payments. However, as Seqwater does not earn a return on pre-2000 assets or dam safety upgrade capex, this provides an additional subsidy to customers.
Water pricing determinations (QCA Act, s. 26(2)).	Not applicable, as there are no water pricing determinations in effect.[a]

a Water pricing determinations are pricing determinations for private sector water supply activities that have been declared under Part 5A of the QCA Act. No activities have been declared under Part 5A.

Glossary

2013 review	the QCA's review of irrigation prices charged by Seqwater for the period 1 July 2013 to 30 June 2017, which was completed in April 2013
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 water 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
ABS	Australian Bureau of Statistics
ACCC	Australian Competition and Consumer Commission
ATO	Australian Taxation Office
capex	capital expenditure
CPI	consumer price index
CRG	customer reference group
CSO	community service obligation
ESC	Essential Services Commission
ESCOSA	Essential Services Commission of South Australia
GST	goods and services tax
HUF	headworks utilisation factor
IPART	Independent Pricing and Regulatory Tribunal
IROL	interim resource operations licence
MDB	Murray–Darling Basin
MRP	market risk premium
NMI	National Measurement Institute
opex	operating expenditure
QCA Act	*Queensland Competition Authority Act 1997*
RAB	regulatory asset base
RBA	Reserve Bank of Australia
RFI	request for information
ROL	resource operations licence
SPR	scheme performance report
WACC	weighted average cost of capital

WAE	water access entitlement
WPI	wage price index
WSS	water supply scheme

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