AtkinsRéalis

Sunwater Supplementary Report

Queensland Competition Authority

9 January 2025

RURAL IRRIGATION PRICING REVIEW 2025-29

Notice

This document and its contents have been prepared and are intended solely as information for Queensland Competition Authority and use in relation to the review of Sunwater's rural irrigation pricing proposal for the 2025-29 price path.

WS Atkins International Ltd assumes no responsibility to any other party in respect of or arising out of or in connection with this document and/or its contents.

This document has 74 pages including the cover.

Document history

Document title: Sunwater Supplementary Report

Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
1.0	For QCA's initial review	AtkinsRéalis Team	DB	JJ	GJ	24 October 2024
1.1	Sections 3 & 5.6.2 added	AtkinsRéalis Team	DB	JJ	GJ	28 October 2024
2.0	Section 5.3 and 5.5 updated	AtkinsRéalis Team	DB	JJ	GJ	07 November 2024
2.1	All sections complete	AtkinsRéalis Team	DB	JJ	GJ	13 November 2024
2.2	Response to QCA comments	AtkinsRéalis Team	DB	JJ	GJ	28 November 2024
2.3	Final Report	AtkinsRéalis Team	DB	GJ	GJ	9 January 2025

Contents

Tables

Figures

1. Introduction

AtkinsRéalis was engaged by the Queensland Competition Authority (QCA) to undertake an expenditure review in support for the rural irrigation pricing over the 2025-29 price path.

Following the publication of the QCA's Draft Report in July 2024, Sunwater and other stakeholders have provided submissions to the recommendations.

This document sets out our review of the topics raised in Sunwater's response document and a number of stakeholder comments.

The structure of the document is as follows:

- Section 2 reviews Sunwater's comments on the QCA's draft operating expenditure (opex) allowance.
- Section 3 examines the largest changes in recommended opex at a scheme level.
- Section 4 examines the Customer and Stakeholder Project (CASPr); and
- Section 5 looks at renewals and capex.

The findings of this report are based on a review of Sunwater's document called "Response to QCA Draft Report" and a number of additional documents provided by Sunwater during this review.

It also builds on the review summarised in our expenditure review report in June 2024 and associated data and analysis. References to the June 2024 AtkinsRéalis expenditure review report are called "our report" hereafter.

2. Opex

Sunwater's response lays out a number of comments related to the opex allowance in QCA's draft report and our expenditure review.

The comments relate to base-year opex adjustments, the efficiency factor, step-changes and a number of methodological concerns. In its response Sunwater restates its view that the expenditure in its initial pricing proposal was appropriate with the exception of the opex efficiency target which it asserts should be removed if QCA maintains its draft report base year opex.

The response does not dispute other recommendations such as the proposed cost escalation factors.

This section addresses the comments received under the following headings:

- Methodological considerations
- Specific opex adjustments
- Efficiency factor

We also examine the largest changes in scheme level opex in Section 3 below.

2.1 Methodological considerations

Sunwater's response raises concerns related to changes since a historical point in time, treatment of endogenous factors, productive and dynamic efficiency and use of opinion. These are addressed below followed by a general conclusion in Section 2.1.5.

2.1.1 Changes since a historical point in time

QCA Draft Report

In our report, we examined whether increases in expenditure since the 2020 review were justified or not. We considered the cost drivers and whether they were caused by exogenous or endogenous factors. In its draft report QCA excluded increases in opex since its 2020 review that had not been justified by Sunwater.

Sunwater response

In its response, Sunwater has raised concerns around using the 2020 allowance as the efficient point of comparison.

It makes the point that it is not in a steady state, that it *"has changed its vision and strategy, implemented significant changes in management and organisational structure, dealt with the COVID-19 pandemic and experienced changes to safety and cybersecurity expectations, among other things*" and that it has been undertaking a transformation at least partly in response to *"QCA feedback on customer engagement and capability gaps in regulatory pricing, ICT and other parts of the business".* It states that the transformation is delivering *"positive outcomes such as increased customer satisfaction, employee engagement, and improved cost management e.g. electricity and insurance."*

It makes the point that *"QCA has only focused on the uplift in cost, as opposed to whether any additional uplift results in the best outcome for customers in the longer term."*

Our view

We understand and agree that organisations do not remain in a steady state.

Indeed we have recommended increases in expenditure relative to the 2020 allowance for many of the areas raised by Sunwater including cyber security, stakeholder relations, general safety and dam safety as well as increased Enterprise Portfolio Management Office expenditure. The non-direct cost increases we recommended make up a total of $5.1M at Sunwater level, with cyber security (+$1.8M) and the Enterprise Portfolio Management Office (+$1.1M) being the largest components.

However, it is also clear that accepting that organisations do not remain in a steady state does not mean that all increases in expenditure are justified. In order for us to recommend other increases in expenditure we would require robust quantified justification. This has not been provided for other cost increases which is why we have not been able to recommend them.

2.1.2 Endogenous factors

QCA Draft Report

In our report we stated that "we consider that endogenous costs above the cost envelope are not efficient unless there are clear explanations to the contrary." In its draft report QCA does not explicitly refer to endogenous factors but does refer to the findings of our report.

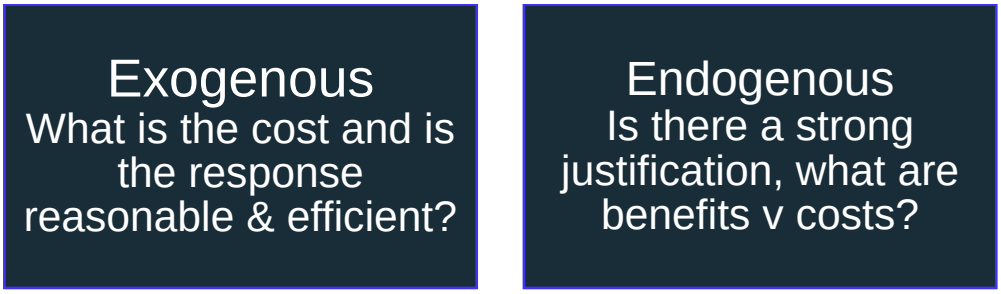
Sunwater response

In its response, Sunwater assets that *"QCA treats all endogenously driven overspends as inefficient and not recoverable from customers, even where it is reasonable to believe these expenditures will benefit customers in the longer term."*

It also asserts that there is asymmetry in the treatment of endogenous increases versus reductions stating that *"AtkinsRéalis assesses the efficiency of cost increases differently to cost decreases. AtkinsRéalis strictly applies the notion that all cost increases are inefficient if not explained by exogenous factors, even though it accepts the legitimacy of endogenous factors when assessing the efficiency of cost decreases such as Sunwater's reduced electricity costs, which were driven by management decisions to seek and enter a lower cost electricity supply contract"*

Our view

Our approach to assessing exogenous and endogenous cost increases is summarised in high level form below, with the key distinction being that endogenous cost increases require a robust justification and demonstration of the benefits to customers.



We do not agree that QCA's draft report and our report treat *"all endogenously driven overspends as inefficient and not recoverable from customers, even where it is reasonable to believe these expenditures will benefit customers in the longer term"*.

Indeed our comment when considering endogenous drivers such as increased ICT expenditure was that Sunwater has not demonstrated that they will benefit customers, stating for example:

- *Justification for endogenous drivers: It is not clear what benefits regulated scheme customers have seen from the significant increases in ICT expenditure. Where they are not responding to exogenous factors, ICT projects should require strong justifications to ensure they deliver significant benefits for customers such as efficiency savings which outweigh the costs. We have seen limited evidence of these savings or other customer benefits. We therefore are not in a position to recommend any increases in expenditure due to any endogenous drivers.*

In our report we recommended that Sunwater improve its benefits tracking and demonstration for ICT and OT investments and develop spend-to-save investment proposals and efficient working practice changes. These improvements would greatly assist the assessment (and recommendation for) increased expenditure related to endogenous factors.

The use of business cases and documentation of benefits for increased expenditure is common (and good) practice in other utilities we have carried out expenditure reviews for. We consider this would greatly assist Sunwater in future reviews.

On the point about accepting the "legitimacy of endogenous factors when assessing the efficiency of cost decreases such as Sunwater's reduced electricity costs", we take a different view to Sunwater's.

Whilst we have commented on Sunwater's good processes and strong management of electricity expenditure, it is also clear that:

- It would not have been able to realise the savings in electricity expenditure without the availability of the whole of government electricity supply arrangement which Sunwater entered in 2020.

- If unit electricity costs had increased and Sunwater had responded efficiently it is extremely likely that we would have recommended accepting the increase in expenditure (as witnessed in many of the other reviews undertaken). This is a strong signal of the primarily exogenous nature of electricity tariffs.

We also note that we have not reduced allowances for other cost decreases, for example:

- We found that, provided the requirements of the IGEM reviews are being met, spending less on IGEM than was allowed for in 2020 is an endogenous decision and, consistent with other adjustments, we considered that it is reasonable not to make a negative adjustment.

- As indirect costs in FY23 were below the QCA 2020 recommendation we made a 'balancing adjustment' to reflect this lower level of regulated indirect opex and to transfer this allowance to corporate support costs.

- We did not net off decreases in other cost centres such as local overhead depreciation.

It is therefore clear that we have not considered endogenous factors in an asymmetrical manner when considering costs reductions.

2.1.3 Productive v dynamic efficiency and savings from technology

QCA Draft Report

Our report included a review of Technology. It found that it was a significant potential efficiency lever. We recommended the development of a SCADA strategy and a process to identify spend-to-save investment proposals and efficient working practice changes.

The QCA's draft report references the potential for technology, and specifically Sunwater's Technology Strategic Roadmap as offering a notable efficiency opportunity.

QCA's draft report does not specifically reference the concepts of productive and dynamic efficiency related to opex.

Sunwater response

In its response, Sunwater asserts that *"Draft positions appear to have focused on minimising costs in the next regulatory period rather than considering whether actual opex incurred "represents the least-cost means, over the life of the associated assets, of providing the required level of service within the regulatory framework". QCA is focused on productive efficiency outcomes, to the detriment of dynamic efficiency, where shorter term uplifts in expenditure are expected to deliver longer term cost savings and value enhancement to customers (uplifts in capability in customer engagement and/or economic regulation are cases in point). This approach appears to leave little opportunity for Sunwater to respond to the evolving needs of its operating environment or its customers.".*

It also asserted that "*QCA has not recognised that in expecting Sunwater to find and deliver savings via technology, it is necessary to provide Sunwater with the necessary funding to make these investments."*

Our view

We agree that increases in short term costs may be justified if they are in customers long term interest. However, our view, as set out in our report, is that Sunwater has not made a robust case that increases in expenditure (beyond those which we have recommended) are justified and in the long-term interests of customers. Where they are we have recommended allowing them (e.g. increased stakeholder and Enterprise Portfolio Management Office expenditure). We also recommended including technology related expenditure such as Sunwater's proposed SCADA program in forecast renewals.

We have commented on the need for improved benefits identification and tracking above. We also note that when compared to other expenditure reviews we have undertaken Sunwater has not been able to provide robust explanation, justification and quantification of where increased opex has been incurred, the reasons for it and the longer term benefits which it will bring[1]. In the absence of this, it is not possible for us to explain to, or quantify for, stakeholders the benefits these costs are bringing and therefore to recommend these increases be accepted.

We consider that Sunwater would benefit from having a business-as-usual documented process for all significant increases in opex spend to ensure and demonstrate that they are in customers longer term interests as well as then ensuring that the benefits are delivered. This will mean that future expenditure reviews will be able to consider these increases in a structured and informed manner.

[1] In most other reviews we have undertaken companies have been able to provide copies of internal business cases used to gain senior management approval for additional opex spending commitments and/or have created business cases for the purposes of the expenditure review setting out the drivers, additional costs and quantified benefits.

2.1.4 Opinion and causation

QCA Draft Report

Our report states that our review *"includes providing opinion on the reasonableness of the baseline year and, if applicable, recommending an alternative baseline year"*. QCA's draft report says that it has *"formed a view on prudency and efficiency".*

Sunwater response

Sunwater asserts that some of the recommendations made are based on opinion without proving causation asserting that "*There are several instances where QCA and its advisors AtkinsRéalis appear to have drawn conclusions without robust justification or seem to have set aside other reasonable facts….. Many of the proposed adjustments are based on assertions or opinions and the correlation of information, rather than demonstrated causation."*

It then provides examples related to the age profile of the workforce, utilisation rates, direct labour for regulated schemes, cost benchmarking and ICT projects.

The response asserts that "*reference to providing opinion appears to conflict with QCA's regulatory guidance*". It quotes QCA's regulatory guidance as saying that QCA *"would not generally adjust opex forecasts where… the adjustment largely reflects a difference of opinion, rather than an identified error or invalid reasoning".*

Our view

We have used judgement to form a view only where this is necessary. This is entirely consistent with the Terms of Reference for our expenditure review and our experience in carrying out other similar reviews.

2.1.5 Conclusions on methodological considerations

Our review of Sunwater's concerns and comments on the methodology suggests that they do not change our view of the recommendations made in our report and those adopted by QCA in its draft report. The bigger challenge, and one for Sunwater to consider for the period between price reviews, is the clarity and strength of justification for increases in expenditure. Without this it is extremely challenging for QCA and its advisors to recommend significant material increases.

2.2 Specific opex adjustments

In our report we recommended a number of opex adjustments which Sunwater has disputed in its response. These relate to direct labour, contractor costs, indirect costs and corporate costs and local overheads. These are discussed below.

Direct labour

QCA Draft Report

In our report we recommended a number of opex adjustments which Sunwater disputes in its response. A number of relevant findings from our report are summarised below

- We found that, with the exception of some additional safety costs, Sunwater had not justified the increase in costs and why it was not able to manage its labour costs within the funding envelope available to it. We

recommended an adjustment of -$1.2M p.a. equal to the difference between outturn FY23 labour expenditure ($12.7M) and the QCA recommendation of $11.2M plus the recommended additional $0.3M safety costs.

- In relation to Sunwater's explanation of the ageing workforce we stated:

  The explanations related to an ageing workforce do not appear convincing based on the information provided to us as less than 25% of the O&M workforce is quoted as being over 55, which is similar to what we would expect if the workforce were evenly distributed by age and is not indicative of a workforce with a significant skewed age but rather appears to be a business-as-usual staff turnover challenge.

- In relation to utilisation rates we stated:

  We also note that as staff numbers have increased (in like for like terms) utilisation has reduced significantly and is below its historical performance, Sunwater's 2019 target and the basis of QCA's recommendation. In its proposal, Sunwater states that the utilisation rates in FY21 and FY22 were impacted by COVID-19. This may be the case. However, it does not explain the continued lower levels in FY23.

- In relation to the Enterprise Agreement we stated:

  "The recent EA does not justify a net increase in direct labour opex given that it also commits Sunwater staff to achieving a productivity offset equal to half of the increase and CPI since FY22 has been significant."

In its draft report, the QCA referenced our report comments on the ageing workforce and noted that the increase in the O&M workforce has been accompanied by a significant decline in utilisation rates. It set out the view that the recent enterprise agreement does not justify a net increase in real term direct labour costs.

Sunwater response

Sunwater comments on the ageing workforce, utilisation rates and the Enterprise Agreement (EA).

Ageing workforce

Sunwater's response quotes our report that *"25 per cent of the O&M workforce is over 55, which is "consistent with what would be expected if the workforce was evenly distributed by age and suggestive of a business-as-usual staff turnover challenge"* and asserts that we have *"not sought to evidence that this as consistent with good/common practice".*

It goes on to assert that the *"distribution of workforce by age commonly follows a 'normal distribution' (or a Bell curve), not an even distribution"*. It quotes several studies including:

- A study of age profiles for water-related and 'all' occupations in the United States.
- A report by the Queensland Water Directorate in 2020 including a quote that *"The ageing workforce trend continues with 35% of the workforce aged over 50 years in 2020 (34% in 2018) and 11% of the workforce aged under 30 years".*
- A paper by the Water Services Association of Australia in 2008 called "An assessment of the skills shortage in the urban water industry" which noted that *"the water utility workforce includes a relatively large proportion of workers over 55 years of age, 18.3 per cent compared with the all industry median of 12.2 per cent."*

Sunwater summarises this as:

> *The evidence suggests workforce age is not evenly distributed as proposed by QCA and AtkinsRéalis and is more commonly normally distributed…. Noting this, there is clear evidence of a trend in workforce ageing that needs to be addressed during the current price path period (as documented by the Queensland Water Directorate and WSAA) and justifies the uplift in investment in graduates, cadets and apprentices to ensure sufficient operational staff and knowledge as employees retire.*

Utilisation rates

Sunwater contends that QCA *"has incorrectly assumed that lower utilisation rates, when coupled with higher costs and no growth in regulated services, indicate cost growth was driven by non-regulated services"*

It states that:

> *The assumption that utilisation rates should remain static year on year is not supported by evidence. Sunwater contends that utilisation rates in a low or zero growth business can and will flex according to factors including:*
>
> - *changing business priorities and strategic objectives, leading to less direct charging activities*
> - *required changes to field work delivery post-COVID*
> - *increased training requirements (including safety related training)*
> - *the balance between internal and external project/program delivery*
> - *response to occupational health and safety reviews*
> - *weather conditions*
> - *the cyclical nature of activities*
> - *the ramp-up to an optimal level of utilisation consistent with new FTEs*[2]
> - *the impact of digital transformation across systems and processes, and on resource utilisation*

It says that it is focused on recruitment and retention in key workforce segments such as Operations.

The EA

Sunwater contends that:

> *[QCA] has assumed, without evidence, that any backdated EA uplift in direct labour costs, compared to what was assumed in the 2020 review, is absorbed by the productivity offset. It should be noted that this approach results in a double count of the efficiency improvement as labour efficiency is also reflected in the efficiency improvement target*

Our view

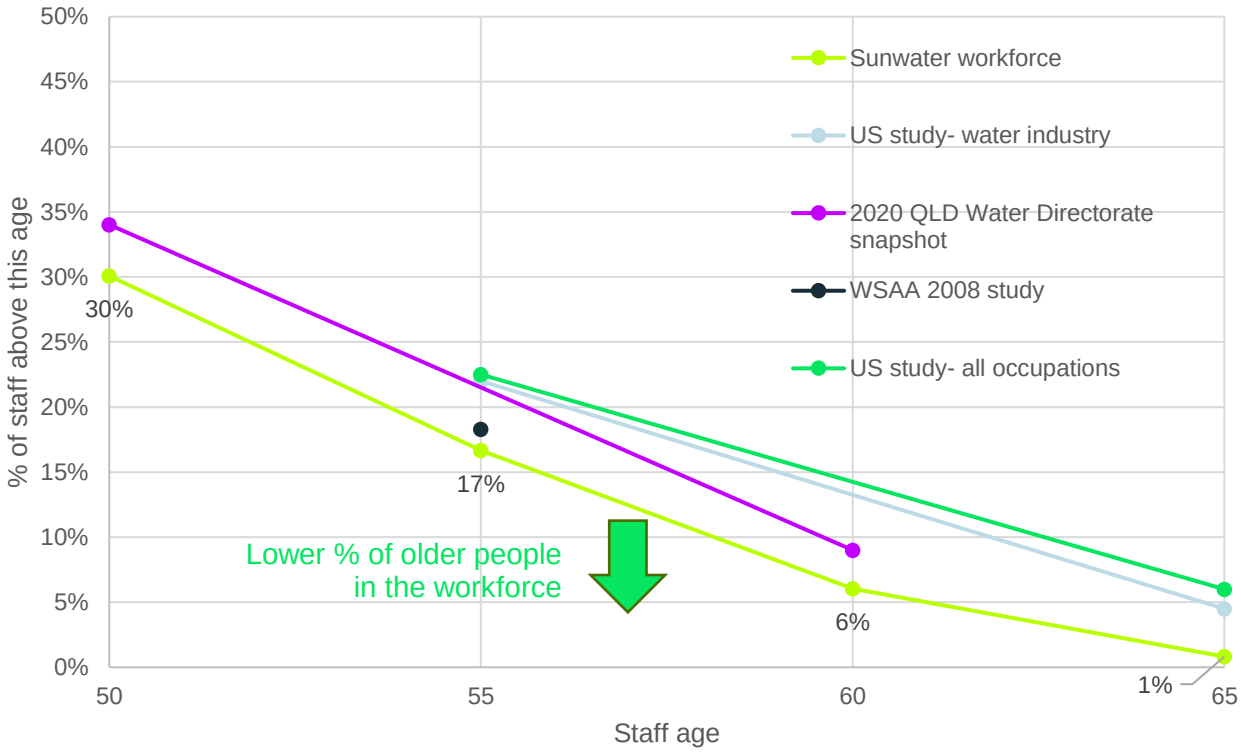
Ageing workforce

We have reviewed the information provided in Sunwater's response document as well the age profile information provided in support of its pricing proposal.

[2] Full time equivalents

We present below a comparison of the age profile for Sunwater's workforce and those of the three studies presented in the response document[3]. Based on this comparison we conclude that Sunwater appears to have a lower proportion of older workers than any of the three comparators quoted in its response document.

Figure 2-1 - Age profile of Sunwater workforce and comparators

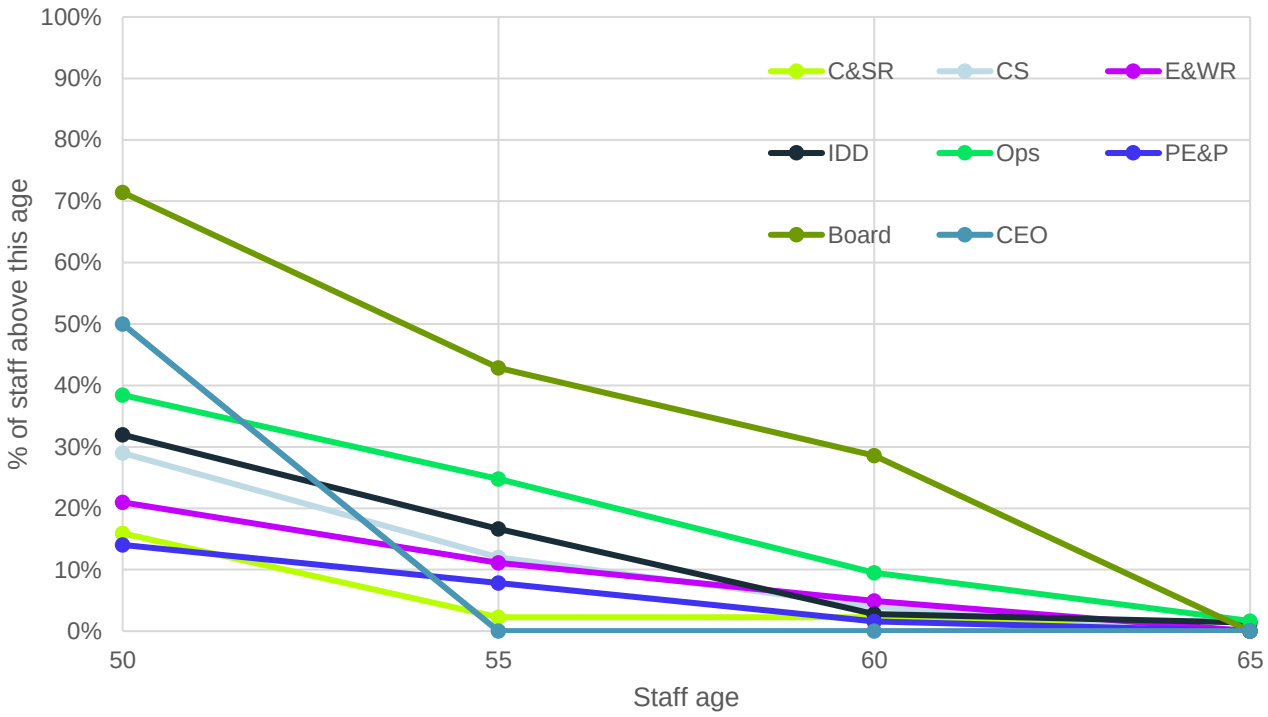


Analysis of Sunwater's response document and spreadsheet 'OX003 Sunwater's workforce profile'

We have also examined the age profile of different divisions. From this it appears that Operations, which is the largest division with 40% of the total workforce, has a higher proportion of older workers than other divisions except the Board.

[3] Note that the comparison is made to Sunwater's workforce rather than divisions within the organisation as the comparators are sector level figures

Figure 2-2 - Age profile of Sunwater divisions



Analysis of Sunwater's response document and spreadsheet 'OX003 Sunwater's workforce profile'

Our conclusions, based on a review of the information provided to us in the original proposal and Sunwater's response, are summarised as follows:

- The studies referenced in its response document suggest that Sunwater's workforce has a lower proportion of older staff than the comparators including the Queensland 2020 study and Australia level 2008 review. This is not supportive of Sunwater having more of, or even the same level of challenge, related to an ageing workforce compared to the wider sector.

- It does appear that the Operations team has a greater proportion of older staff than other Sunwater divisions. However, that is not sufficient in its own right to allow us to recommend an increase in labour costs noting:

    - The case has not been made that the workforce age profile should result in a *net increase* in labour cost. In general, older staff have a higher unit labour cost than younger staff so savings may be made when older staff retire and are replaced by younger staff.

    - Sunwater has not provided information which establishes a *trend* in workforce ageing. Rather, we have been provided a snapshot of current/recent age profile with no indication of what the profile would have been without these actions, how it has changed over time or what it was at the start of the current price path period. We cannot therefore conclude with any confidence what the trend has been over time.

    - The case has not been made as to why the current price path period is different to previous periods or, more importantly, whether this *'investment in graduates, cadets and apprentices'* is indeed an ongoing cost which should be used as the basis for higher future opex or an investment which should lead to net savings in labour costs in the next price path period.

We therefore conclude that we are not in a position to amend the direct labour costs recommended in our report as a result of Sunwater's response about the ageing workforce.

Utilisation rates

We acknowledge Sunwater's contention that utilisation rates may vary year-on-year with factors such as weather conditions. However, the points made appear not to have a material impact on recommended expenditure. In particular we note that:

- Sunwater's own projections (see Figure 2-3 below) are for utilisation to improve significantly in FY24, suggesting that the utilisation in the base year, FY23, is not as efficient as the FY24 projected level or FY18, 19 or 20 outturn levels. In this way, it appears that Sunwater's own projection is supportive of the comments in our report.

- QCA's and our recommended direct labour expenditure does not depend on the assumption that utilisation is static on a year-on-year basis or on the assumption about levels of non-regulated activities. We understand that utilisation may vary year-on-year and have simply used utilisation trends to indicate the potential for improvement as indicated by Sunwater's own projected figure for FY24 as well as Sunwater's previous targets and outturn performance.

- The other points made in the response do not make the case that customers should pay for higher labour costs but are either a comment on the potential for variability in utilisation rates[4], things like safety costs[5] (for which we recommended increased expenditure) or statements about the potential impact of factors such as digital transformation[6] and recruitment/retention[7] without setting out or quantifying the link to utilisation or direct labour costs.

We therefore find that we are not in a position to amend the direct labour costs recommended in our report as a result of Sunwater's response about utilisation rates.

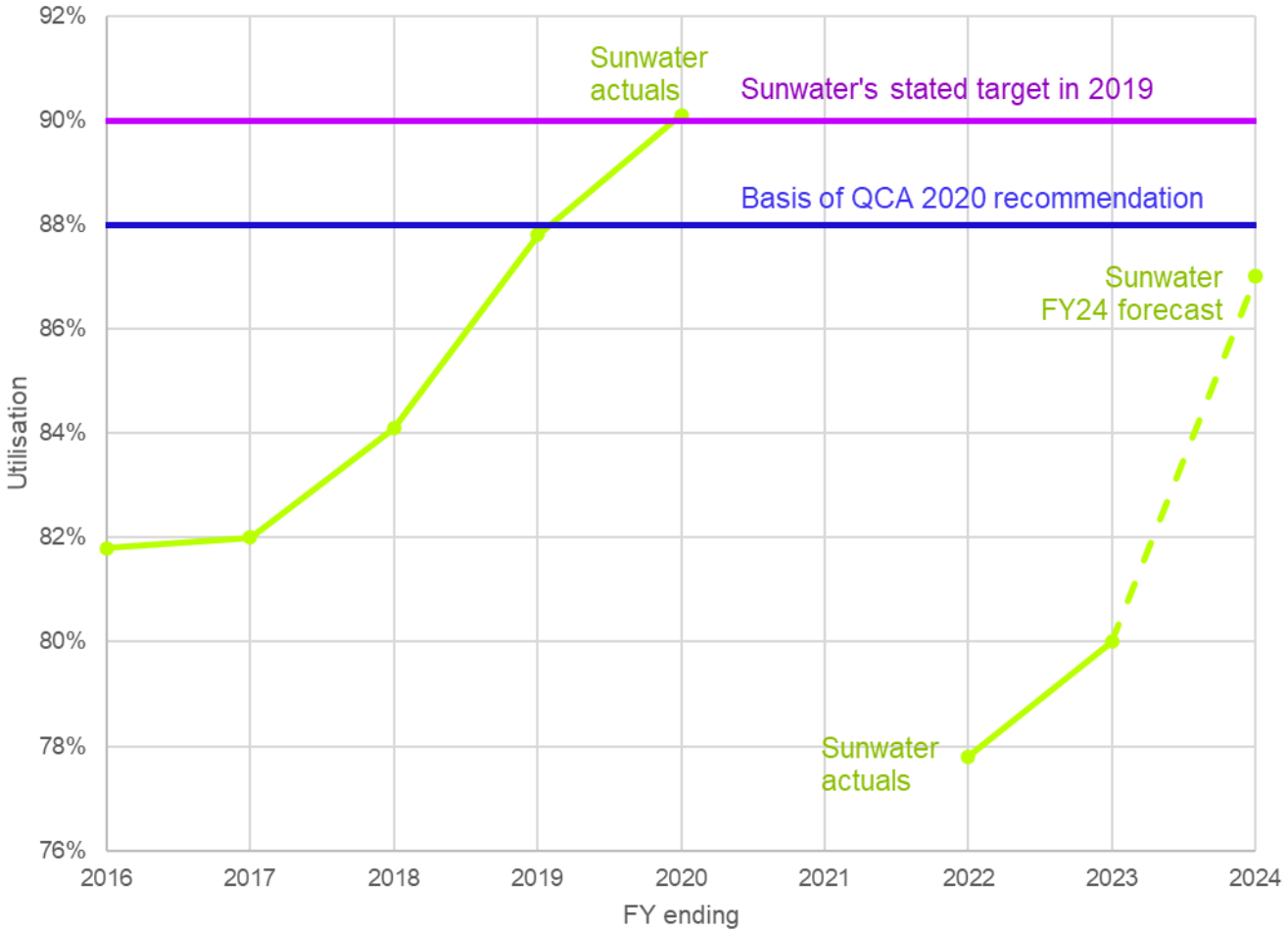
[4] Saying for example *"This… does not explain why utilisation rates should remain constant when they can be impacted by the timing of activities, the cyclical nature of some activities or changes to workplace laws"* and *"Sunwater contends that utilisation rates in a low or zero growth business can and will flex according to factors including… weather conditions…. the cyclical nature of activities"*

[5] Saying for example that utilisation rates may vary with "*increased training requirements (including safety related training)*….[and]… *response to occupational health and safety reviews*"

[6] Saying that utilisation rates may vary with *"the impact of digital transformation across systems and processes, and on resource utilisation"*

[7] *"Sunwater's strategic workforce plan has identified key workforce segments, such as information/data business analytics, customer and stakeholder, and operations, that make a critical contribution to its strategic capabilities. Not only do roles in these groups typically possess highly developed skills and in-depth knowledge, but they are often in short supply. Sunwater is focused on recruitment and retention in these key workforce segments."*

Figure 2-3 - Utilisation rates



Source: Table 31, Sunwater proposal and QCA 2020 report.

The EA

Our approach to deriving base year direct labour costs assumes that the EA does not result in a net increase in real terms base year, i.e. FY23 expenditure. Sunwater's point is that doing so would result in a *'double count of the efficiency improvement as labour efficiency is also reflected in the efficiency improvement target'*.

However, we consider that this is to confuse two factors:

- Setting a base year level of expenditure. This is where our assumption about the effects of the EA has an effect and is why the text Sunwater is responding to is in the Section of our report called "Assessment of proposed baseline year opex".

- Efficiency achieved after this base year. Sunwater has proposed efficiencies after the base year i.e. from FY24 onwards.

It is clear to us that these are two separate processes affecting different years. We would also highlight that we have recommended accepting Sunwater's proposed FY24 labour cost escalation as set out in Table 5-10 of our report.

We therefore find that we cannot amend the direct labour costs recommended in our report as a result of Sunwater's response about the EA.

Contractor costs

QCA Draft Report

In our report we recommended a number of opex adjustments which Sunwater disputes in its response.

Sunwater had proposed a reduction of $0.9M for contractor costs being higher than usual in FY23. We recommended an adjustment to reflect the FY18-23 average for all schemes (an aggregate reduction of $1.0M) instead of Sunwater's proposed $0.9M reduction.

In its draft report, the QCA stated that it was unclear how schemes were selected for replacing actuals with a 5-year real historical average. It set out its view that a 5-year real historical average across all schemes would more closely reflect costs under typical conditions.

Sunwater response

Sunwater's response states that it does not support QCA's draft position:

> *"on the grounds that this is based largely on a difference of opinion over the relative merits of using a pure historical averaging approach versus Sunwater's approach that allows for a deviation from the averaging approach where justified due to the local expertise of its operational team. This appears to be inconsistent with QCA's guidance, where it states that it "would not generally adjust opex forecasts where … the adjustment largely reflects a difference of opinion, rather than an identified error or invalid reasoning."*

It goes on to assert that QCA's draft position is not made on the basis of any evidence or analysis.

Our view

In its pricing proposal, Sunwater proposed a reduction of $0.9M for contractor costs being higher than usual in FY23. We derived the average FY18-23 contractor expenditure for each scheme and recommended an aggregate reduction of $1.0M instead. As such the difference between our recommendation and Sunwater's proposed contractor costs is only $0.1M p.a.

As outlined in our report Sunwater did not make it clear how the 13 schemes to which it applied adjustments were selected.

We do not agree with the assertion that the recommended expenditure reflects a difference of opinion and is not made on the basis of evidence or analysis. Indeed the approach taken is based on a consistent analysis of historical contractor costs in *every* scheme and as such is considered to have a more solid evidence and analytical basis than that proposed by Sunwater.

We note that Sunwater's response does not dispute the analysis underlying our recommendation.

We therefore find that we cannot amend the contractor expenditure recommended in our report as a result of Sunwater's response.

Indirect costs and corporate overheads

QCA Draft Report

In our report we recommended a number of opex adjustments which Sunwater disputes in its response. A number of relevant findings our report are summarised below

- We recommended accepting increased costs due to exogenous factors related to Cyber security, the Enterprise Portfolio Management Office, Stakeholder relations, Safety expenditure and Dam safety. We also recommended amendments to reallocate costs between indirect and corporate support costs.

- We recommended an adjustment of +$3.7M to the QCA's 2020 recommended corporate costs and of -$2.7M the QCA's 2020 recommended indirect costs. This resulted in recommended corporate costs $0.8M lower than Sunwater's proposal and indirect costs equal to Sunwater's proposal.

We also presented benchmarking of corporate costs and ICT expenditure.

In its draft report, the QCA referenced the corporate cost benchmarking and stated that it suggested that Sunwater is not obviously more efficient than other rural water businesses.

Sunwater response

Sunwater's response cites a number of issues including:

- *QCA refers to corporate cost benchmarking work undertaken by AtkinsRéalis, where Sunwater's corporate costs were compared with other rural water businesses. AtkinsRéalis could not form a view that Sunwater was less efficient than its counterparts. This provides evidence that existing expenditure is reasonable, and as such should not be adjusted.*

- *AtkinsRéalis and QCA were critical of Sunwater's historical approach to cost estimation and project delivery. [..] However, this does not demonstrate that the final cost of delivering those projects was not efficient, merely that Sunwater, in some instances, underestimated the cost of delivering those projects. This is an example of correlation being considered sufficient to justify a cost reduction, without consideration of causation. Overspending on the forecast allowances does not mean that outturn costs were not efficient. For example, in the case of the CASPr procurement process, the cost increased from the initial estimate due to a change in scope to achieve a better management of risks. QCA accepted this logic when it assessed the actual costs of Sunwater's renewal projects as prudent and efficient even while noting there was scope to improve its asset management and planning processes.*

- *AtkinsRéalis has referenced an ICT benchmarking analysis, which it uses to suggest that "Sunwater's spend is a significant outlier, even taking into account the limitations of those type of analysis." The limitations of this analysis have been detailed in Section 4.2, and are partially recognised by AtkinsRéalis (see footnote 78). In light of the flaws Sunwater has highlighted, these benchmarks should not be used as part of decision-making for the Final Report.*

Our view

On the point about corporate cost benchmarking, our report laid out a number of comparisons as well as the challenges associated with benchmarking.

We are not convinced by the argument that our corporate cost benchmarking provided evidence that expenditure is reasonable. In fact we found that *"on a number of metrics Sunwater compares unfavourably with other rural utilities, having higher corporate costs per head than all of the comparators and the second highest corporate costs per totex"*. This clearly does not represent support for the assertion that existing expenditure is reasonable.

We would also point out that the corporate benchmarking presented was not the primary basis of the recommended indirect and corporate overhead expenditure.

Sunwater also took issue with our findings on technology in relation to its historic ICT cost estimation and benchmarking analysis. We agree with the point that the weaknesses in cost estimation *"…does not demonstrate*

that the final cost of delivering those projects was not efficient". However, it would lead to a different pattern of investments if the costs had been more accurately estimated and the business had been operating within a constrained total budget. This would have impacted on Sunwater's decision-making in terms of what projects to prioritise. By comparison, we praised Sunwater's approach for the future price path, using the MoSCoW prioritisation method that considers which projects provide the best return on investment and/or are mandatory requirements within a totex budget of $20M per year, which was not evident in the past. We did not make any adjustments to Sunwater's expenditure as a result of these observations, we limited our findings to making five recommendations for managing technology in the future[8] so no changes are required.

Sunwater also cited flaws in our ICT benchmarking analysis and stated that *"..these benchmarks should not be used as part of decision-making for the Final report"*. We acknowledged weaknesses in any benchmarking in our report and made it clear that it should only be used to provide some additional insight alongside other Sunwater specific evidence. We confirm that the benchmarking was not directly used as part of decision-making for our report.

Local overheads

QCA Draft Report

In our report we did not recommend accepting the increase in local overhead costs relative to the QCA's 2020 recommended local overhead costs. This resulted in recommended local overheads of $1.6M less than Sunwater's proposal.

In its draft report, the QCA notes that the key driver for the increase in the local overhead cost base is the reduction in utilisation rates for direct labour. It commented that this may reflect a temporary reduction in productivity, in anticipation of a future increase in operations and maintenance work in non-regulated services. It did not propose recovering the increase in local overheads from regulated schemes.

[8] Recommendation 1: Technology costs should in our view have been presented by Sunwater in its submission to QCA as they constitute by far the biggest contribution to Corporate costs and presented broken down by capitalised costs and opex. There has been a shift to opex solutions and there are also potential trade-offs between capex and opex depending on which solution is selected, so it is essential to consider the total expenditure.
Recommendation 2: The ability to estimate costs robustly from the early stages of technology development is key to optimal decision making and ensuring that investments reflect value for money. This feeds directly into an assessment of prudence and efficiency. This is an area that has been work in progress for Sunwater.
Recommendation 3: Benefits, especially relating to future efficiency savings, delivered by ICT and OT investments are set out in Business Cases and subsequently in Benefits Management Plans, but the approach to tracking and demonstrating their achievement for historic expenditure could be strengthened to better demonstrate confidence in future delivery. Also, if the efficiencies set out in a Business Case are not realised, or only partially realised, this may lead one to conclude that some or all of the expenditure was not prudent hence why this is critical in our view to have visibility on the outcomes of the investments. This learning needs therefore to be translated into improved management of future initiatives.
Recommendation 4: There is potential for collaboration and partnering on areas of emerging or unproven technology which may be happening, but this was not demonstrated.
Recommendation 5: The impact of ICT and OT investments should lead in many cases to demonstrable improvements in Customer and Operational KPIs which Sunwater can be monitored against and therefore be held accountable.

Sunwater response

Specific to local overheads Sunwater makes the following points:

- *QCA/AtkinsRéalis have referenced the reduction in utilisation (which increases proportion of time booked to local overhead codes) and workforce decisions that were premised on workplace age. As demonstrated earlier, both these issues were incorrectly determined.*

- *QCA also fails to consider the impact of safety on these local overheads. Additional time and effort to ensure activities are planned and delivered safely affects the entire business, particularly the local overhead costs where senior operational leadership roles reside.*

Sunwater also says that *"QCA has not identified the FTEs that should not have been recruited, nor demonstrated those activities could be delivered by the existing workforce, nor explained how Sunwater should manage the impact of these adjustments on the workforce e.g. retrenchment of existing FTEs, reallocation of roles to other FTEs, etc.".*

Our view

The first of Sunwater's points relates to workforce age and utilisation and the consequent increase in local overhead cost. We have responded to these points above and consider that Sunwater's response does not provide justification for a change in the recommended labour costs. By extension we also consider that Sunwater has not justified increased local overhead costs for these reasons.

The second point relates to a failure to consider the impact of safety on local overheads and refers to additional time and effort to ensure activities are planned and delivered safely. We can confirm that we have considered the impact of safety which is why we recommended an increase in indirect costs for example (see Table 3-20 in our report).

However, the explanations for increased local overhead costs provided by Sunwater as summarised in Table 3-12 of our report, relate largely to increases in FTE numbers and no breakdown or estimates of safety-related local overhead expenditure has been provided. It is not clear how we would be able to recommend increased expenditure in the absence of a clear, evidenced and quantified explanation of the impacts of safety on local overheads.

The last point made relates to a suggestion that QCA should identify the FTEs which should not have been recruited and explain how Sunwater should manage the impacts of the adjustments on the workforce. These issues appear to relate to the management of the business as opposed to price regulation and as such we consider that they are not in the remit of an expenditure review.

We are not in a position to justify a change in our recommended local overhead costs as a result of Sunwater's responses.

2.3 Efficiency factor in addition to other adjustments

QCA Draft Report

Sunwater's pricing proposal has built in a cumulating annual efficiency of 0.5% p.a. from FY24 onwards. This was applied to expenditure which Sunwater considers as 'non-controllable' as well as 'controllable' opex.

In our report we found that that, with the exception of electricity costs, Sunwater is not at an advanced stage of its efficiency journey and that there was a strong basis for achieving efficiency. We concluded that Sunwater's proposed 0.5% p.a. efficiency challenge is achievable and it should be possible to exceed it.

In its draft report the QCA stated that it considered that Sunwater has the potential for ongoing efficiencies over the upcoming price path period and accepted Sunwater's proposed ongoing opex efficiency target of 0.5%p.a..

Sunwater response

Sunwater's response acknowledges the scope for opex efficiency to be made. However, it also raises a concern around the application of its original efficiency factor in addition to other adjustments stating:

> *Sunwater is now concerned that in accepting its 0.5 per cent per annum efficiency proposal QCA has not acknowledged the impact of their proposed adjustments on the actual savings this requires Sunwater to find. That is, the actual opex efficiencies required are significantly higher than the 'headline' efficiency target of 0.5 per cent per annum, due to the adjustments to base-year expenditure made in the Draft Report.*
>
> *Sunwater estimates the cumulative efficiency factor is around 1.5 per cent per annum when its actual opex in the base year is taken into account, which translates to Sunwater having to realise opex savings of around $21 million in nominal terms in the next price path period.*

In its response Sunwater also provided a number of comparators for opex efficiency ranging from -1.0% p.a. to + 0.5% p.a.

Table 2-1 - Sunwater's quoted efficiency factor benchmarks

Utility	When	Factor
Seqwater	2022	-0.20%
Yarra Valley Water	2023	-0.26%
Barwon Water	2023	-0.10%
Greater Western Water	2024	-0.20%
Gippsland Water	2023	+0.50%
South East Water	2023	-0.87%
Southern Rural Water	2023	-1.00%
Melbourne Water	2021	-0.20%

Table 28, Sunwater pricing proposal

Our view

Our terms of reference include commenting on the prudency and efficiency of proposed expenditure.

We consider that applying an efficiency of 0.5% p.a. is reasonable. The main reason that we consider it to be reasonable is that 0.5% p.a. is below recent estimates of multi-factor productivity in Australia as has been applied to a number of water utilities as a continuing efficiency challenge (see Box 1 below). Given that it is standard practice, where appropriate, to apply catch-up efficiencies in addition to continuing efficiency challenges it appears reasonable that the challenge of 0.5% p.a. is applied in addition to adjustments for inefficient expenditure.

Box 1: Recent examples of continuing efficiency estimates

- SA Water (2024) – 0.9% p.a. for continuing efficiency ('industry wide frontier shift'), as proposed by SA Water[9].
- Sydney desalination plant (2023) – 0.7% p.a.[10] continuing efficiency challenge, based on Australian Productivity Commission multi-factor productivity analysis in addition to a 0.5% p.a. catch-up efficiency.
- WaterNSW Rural Valleys– 0.7% p.a. continuing efficiency in addition to various catch-up efficiencies. This was based on the compound long-run average of the Australian Bureau Statistics (ABS) multi-factor productivity series for the Australian economy[11].
- Sydney Water (2020) and Water NSW-Greater Sydney (2020) – 0.8% p.a. continuing efficiency challenge based on multi-factor productivity data from the Productivity Commission in addition to various catch-up efficiency challenges.

We also note (as detailed in Box 2 below) that the efficiency factors applied by ESC in its recent price determinations are significantly higher than those quoted in Sunwater's submission, ranging from 0.5% p.a. to 3% p.a.. We consider this to lend further support to the reasonableness of the efficiencies applied.

Box 2: ESC efficiency factors.

We have also considered the benchmarks provided by Sunwater. We note that the figures quoted by Sunwater for the ESC price determinations represent the net effect of efficiency *and* cost increases due to growth in customer numbers[12], rather than the efficiency factor applied. When we isolate the proposed efficiency rate from growth the proposed efficiency rates are generally significantly higher as illustrated in the following recent ESC reviews:

- ESC applied an **efficiency factor of 3% p.a**. to Greater Western Water. The 0.2% quoted by Sunwater is the net effect of this 3% and average growth of 2.8% p.a. in controllable opex[13].
- Gippsland Water proposed an **efficiency rate of 0.5% p.a**. with no underlying growth in controllable opex[14].
- Barwon Water proposed an **efficiency improvement rate of 2.0 % p.a.**. It also proposed an average cost growth rate of 2.1 % p.a. and it is only when combining the effects of cost growth and efficiency that an increase of 0.1%. p.a is derived[15].
- Yarra Valley proposed an **efficiency improvement rate of 1.7 % p.a**. It is only when combining this with growth-related costs that the 0.26% p.a. is obtained[16].

[9] See SA Water Regulatory Determination 2024 - Final determination - Statement of reasons
[10] See Final-Report-Sydney-Desalination-Plant-Pty-Ltd-Review-of-prices-to-apply-from-1-July-2023-June-2023.PDF
[11] See Final-Report-Review-of-Water-NSWs-rural-bulk-water-prices-September-2021.PDF
[12] i.e. increases due to projected growth in customer numbers rather than input price escalation or real price effects
[13] See https://www.esc.vic.gov.au/sites/default/files/documents/Greater-Western-Water-price-review-2024-Review-of-Response-to-the-ESC-Draft-Decision-on-Expenditure-Forecasts-20240605.pdf
[14] See Gippsland Water final decision
[15] See Barwon Water final decision
[16] See Yarra Valley Water final decision

- South East Water proposed an **efficiency improvement rate of 2.0 % p.a.**. It is only when combining this with growth-related costs of 1.13% pa. that the 0.87% p.a. is obtained[17].
- Southern Rural Water did not propose any increases in expenditure but proposed an efficiency step change equivalent to $0.85M p.a.[18]
- ESC applied an **efficiency improvement rate of 1.2% p.a.** to Melbourne Water's controllable opex. It is only when combining this with growth-related costs of 1% pa. that the 0.2% p.a. is obtained[19]. ESC also pointed out that focusing on the 'net efficiency rate' (efficiency minus growth) does not follow the approach set it its guidance.

We consider that it is appropriate for the 0.5% p.a. figure to be applied to all costs. This is consistent with (1) the use of industry level multi-factor productivity analysis data and (2) the fact that management has some degree of influence on (nearly) all costs in the long term.

As such, we therefore consider it is reasonable to maintain the approach taken by the QCA in its Draft Report. The use of 0.5% is below recent estimates of multi-factor productivity in Australia and the lowest end of the range applied by ESC in its recent price determinations.

[17] See South East Water final decision
[18] See Southern Rural Water final decision
[19] See Melbourne Water Final Decision

3. Largest scheme opex changes

3.1 The approach to scheme level recommendations

We understand that some stakeholders have expressed concern about the high level of cost increases in some schemes as compared to the 2020 review and that much of this relates to labour costs.

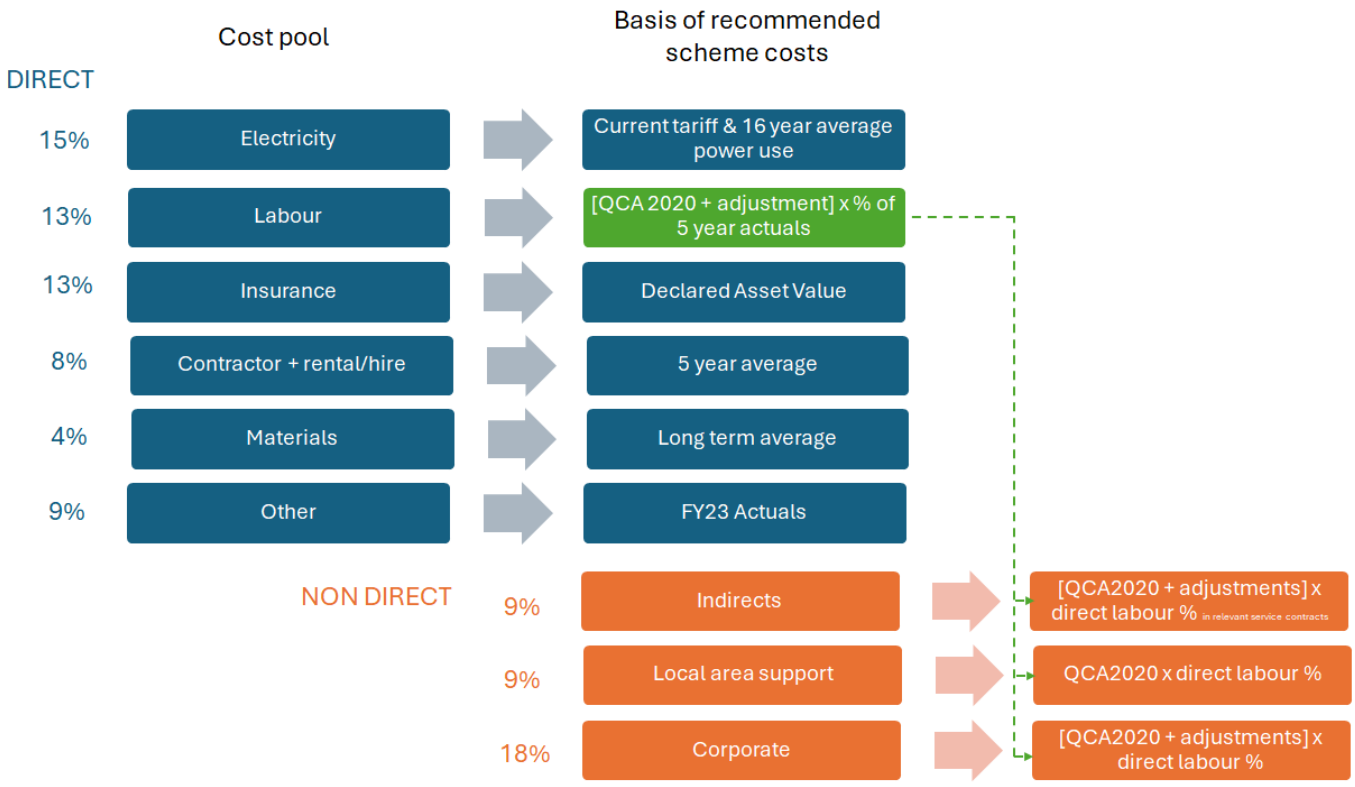
In this section, we provide further justification of the approach taken in our draft report to allocating recommended costs to the scheme level, as well as helping the QCA to understand the drivers for significant scheme level changes in the opex allowance.

For background we have started by summarising graphically below the high level approach used to derive scheme specific opex allowances. Key features of the approach include:

- Total labour costs across all regulated schemes are based on QCA's 2020 recommendations adjusted for changes in expenditure which we consider robustly justified. These costs are then allocated to schemes based on the proportion of actual labour costs incurred over the last five years.
- Electricity costs are based on modelling by Sunwater of the current electricity tariff applied to the average power use within the scheme.
- Total insurance costs are based on a review of insurance premiums. These are then applied to the schemes on the basis of each scheme's declared asset value (DAV), a metric used for insurance purposes.
- Other costs are based on recent actuals or similar i.e. FY23 figures or recent averages.
- Non-direct costs (corporate, local area support and indirect costs) are allocated to schemes in proportion to recommended direct labour.

We have recommended that Sunwater move to a more causal approach to allocating non-direct costs in the coming price path period. However, this is likely to take some time to develop and put in place. Given this, the allocation of costs in our recommendations mirrors Sunwater's current approach to allocating non-direct costs i.e. they are mainly allocated via direct labour costs.

Figure 3-1 - High level summary of the approach taken to scheme specific opex recommendations



3.2 Scheme level changes

To examine the materiality of the change in opex resulting from this review on a like-for-like basis we have compared:

- The opex allowance in QCA's 2020 recommendations for the year 2023; with
- The recommended base year (i.e, 2023) opex from this review.

We summarise below the schemes with the most significant differences between the 2020 recommendations and those resulting from this review. This table only includes schemes where the change is greater than 20%.

Table 3-1 - Change in recommended 2023 opex by Scheme ($k)

	QCA 2020 recommended 2023 opex allowance*	Our recommended 2023 base year	Difference	Difference %
Burdekin Supply	3,468	4,640	1,172	34%
Cunnamulla Weir Supply	52	35	(17)	-32%
Lower Fitzroy Supply	263	355	92	35%

Lower Mary Supply	153	120	(33)	-22%
Maranoa Supply	36	44	8	23%
Nogoa Supply	2,390	3,347	957	40%
Three Moon Supply	709	889	180	25%

Analysis of QCA 2020 spreadsheet "QCA recommended opex - 2020 review (excl Eton distribution system)".

Note: schemes with more than 20% change only. QCA 2020 recommended allowance has been adjusted for outturn CPI.

We have reviewed the drivers for the change in recommended expenditure for Burdekin Supply, Nogoa Supply and Three Moon Supply schemes as the only schemes with both a greater than 20% and $100k change.

The drivers for the changes for each of the three schemes are summarised below.

3.3 Burdekin Supply

We have reviewed the change in costs and allowances over time and draw a number of conclusions:

- The largest contributor to the increase in Burdekin Supply opex appears to be increased Local Authority Rates and Land Tax ('other direct' costs), accounting for approximately $0.7M p.a. increase.
- Increased insurance costs are also a major driver, leading to a $0.4M p.a. increase. We note that (1) these form part of the commercial negotiations with insurers and (2) we reviewed the total amount of insurance expenditure in our expenditure review and recommended accepting Sunwater's proposed base year insurance expenditure.
- Other increases include labour costs ($0.2M p.a.) which represents a larger proportional increase than other schemes and also attracts higher non-direct costs. Sunwater has provided a breakdown of hours in 2018 and 2023 and commented that the increase is "due to an increased level of seniority and skill aligned with Sunwater's strategic direction to build business resilience and succession planning requiring additional supervisory and training hours with more senior resources". It also comments on wider labour market conditions.
- Unlike schemes with significant electricity use, Burdekin Supply has not benefited from the offsetting savings that many schemes have seen from reduced electricity costs.

The table below presents a summary comparison of the changes with those seen for other schemes at cost type level.

Table 3-2 - Changes in Burdekin Supply costs compared to other schemes ($FY23M)

Cost type	Change FY19 to FY23	Equivalent average change across all schemes*	Difference from other schemes
Electricity	0.08	(0.32)	0.40
Insurance	0.40	0.10	0.30
Contractors	(0.20)	0.03	(0.23)
Labour	0.18	0.07	0.12
Materials	(0.01)	0.01	(0.02)

Other Direct	0.97	0.17	0.80
Corporate Support	0.37	0.26	0.11
Indirect Costs	(0.12)	(0.16)	0.03
Local Area Support	0.03	(0.02)	0.05

Analysis of Sunwater's spreadsheet '09 OPEX_Electricity_Final Values'

** scaled to this scheme*

3.4 Nogoa Supply

We have reviewed the change in costs and allowances over time and draw a number of conclusions:

- The largest contributor to the increase in Nogoa opex appears to be contractor costs, accounting for approximately $0.4M p.a. increase. Sunwater comments that this was largely driven by high weed control activities in FY23. The base year adjustments applied by Sunwater and even more so by AtkinsRéalis (-$0.2M) reduces the effect of contractor costs on future recommended opex.

- Other increases include labour costs ($0.2M p.a.) which represents a larger proportional increase than other schemes and also attracts higher non-direct costs. As with Burdekin Supply, Sunwater has provided a breakdown of hours in 2018 and 2023 and commented that the increase is "due to an increased level of seniority and skill aligned with Sunwater's strategic direction to build business resilience and succession planning requiring additional supervisory and training hours with more senior resources". It also comments on wider labour market conditions. The effects of labour costs in corporate costs are significantly mitigated by our recommended corporate cost adjustments as discussed in the expenditure review report.

- Increased insurance costs are also a driver, leading to a $0.2M p.a. increase. Sunwater has explained[20] that the replacement cost estimate for Fairbairn Dam was increased by $160 million to reflect the recent investment in dam safety upgrades, thereby increasing DAV, the measure by which insurance costs are allocated. This is likely to be the main driver of the greater increase seen in insurance cost for Nogoa Supply than other schemes. We also note that (1) the total insurance costs form part of the commercial negotiations with insurers and (2) we reviewed the total amount of insurance expenditure in our expenditure review and recommended accepting Sunwater's proposed base year insurance expenditure.

- Other direct costs have contributed to the increase with higher local authority rates and land taxes contributing $0.1M to the increase.

- We also note that, unlike schemes with significant electricity use, Nogoa Supply has not benefited from the offsetting savings that many schemes have seen from reduced electricity costs.

The table below presents a summary comparison of the changes with those seen for other schemes at cost type level.

[20] In RFI 37

Table 3-3 - Changes in Nogoa Supply costs compared to other schemes ($FY23M)

Cost type	Change FY19 to FY23	Equivalent average change across all schemes*	Difference from other schemes
Electricity	(0.03)	(0.24)	0.21
Insurance	0.24	0.08	0.16
Contractors	0.38	0.02	0.35
Labour	0.23	0.05	0.18
Materials	(0.01)	0.01	(0.01)
Other Direct	0.28	0.13	0.15
Corporate Support	0.40	0.19	0.21
Indirect Costs	(0.06)	(0.12)	0.06
Local Area Support	0.02	(0.01)	0.03

Analysis of Sunwater's spreadsheet '09 OPEX_Electricity_Final Values'

** scaled to this scheme*

3.5 Three Moon Supply

We have reviewed the change in costs and allowances over time and draw a number of conclusions:

- The change in recommended opex appears to be due to a difference in assumptions in labour costs, insurance costs and 'other direct' between the 2020 and 2024 review.
- We also note that, unlike schemes with significant electricity use, Three Moon Supply has not benefited from the offsetting savings that many schemes have seen from reduced electricity costs.

The table below presents a summary comparison of the changes with those seen for other schemes at cost type level.

Table 3-4 - Changes in Three Moon Supply costs compared to other schemes ($FY23M)

Cost type	Change FY19 to FY23	Equivalent average change across all schemes*	Difference from other schemes
Electricity	(0.01)	(0.08)	0.07
Insurance	0.04	0.03	0.02
Contractors	0.00	0.01	(0.01)
Labour	0.00	0.02	(0.01)
Materials	0.02	0.00	0.02
Other Direct	0.00	0.04	(0.04)
Corporate Support	0.07	0.06	0.00

Indirect Costs	(0.05)	(0.04)	(0.01)
Local Area Support	0.00	(0.00)	0.01

Analysis of Sunwater's spreadsheet '09 OPEX_Electricity_Final Values'

** scaled to this scheme*

3.6 Overall conclusions

We summarise some general conclusions below.

We have reviewed the three schemes with the largest change in opex allowance for the year 2023. This has suggested a number of key themes including:

- Burdekin Supply and Nogoa have seen higher labour cost increases than the average which has also brought with it higher non-direct costs.
- Other drivers for increased allowances include local authority rates, land taxes and insurance costs.
- All three schemes have relatively low electricity usage and therefore have not benefited from the offsetting reduction in electricity costs seen by other schemes.

We consider that the approach taken to recommending opex allowances for these schemes (as well as others) remains appropriate. The reasons for this include:

- Increases in total direct opex have only been allowed where there has been robust justification as detailed in Section 5 of our report. This is reflected in the fact that total recommended labour costs are $1.2M lower than recent (FY23) actuals for example.
- On a scheme-by-scheme basis, recommended labour cost (and consequently non-direct cost) allocations reflect the average direct labour costs over the last five years as a proportion of the direct labour costs across all regulated schemes. This means that the allowances align with the proportion of outturn costs actually faced by each scheme and one-off effects and inter-annual variation have limited effect.
- Using the current tariff and longer term usage data at a site levels appears to be the most appropriate way to assess electricity costs.
- Other costs such as local authority, land taxes and insurance costs are largely driving by external factors and it is appropriate to base these on most recent actuals.
- The allocation of non-direct costs is based on Sunwater's current approach to allocation i.e. direct labour. Whilst we have recommended a shift to a more causal approach, we consider this will take time to implement and, as set out in Section 3.7 of our report, it appears likely that moving to a more causal approach would have had minimal impact (in FY23 at least) because of the under-recovery of non-direct costs.

We therefore conclude that the approach taken remains reasonable and do not recommend any changes as a result of this review.

4. CASPr

In this section we address the comments in Sunwater's response to the QCA draft report related to the costs of CASPr i.e. the build costs and ongoing costs. We then address the comments on the cost treatment of the expenditure.

4.1 Build costs

QCA Draft Report

Sunwater said in its pricing proposal it was investing $38.6 million to replace an aged and no-longer-supported customer billing and contact management system to ensure that it can continue to provide the personalised service that customers expect. It proposed to treat this build cost as capex to be recovered under its proposed RAB approach with a commissioning date of 1 July 2025 and an asset life of 20 years. Sunwater also proposed a step change of $1.7 million each year of the price path period to account for the ongoing costs associated with this billing system. It proposed to share the costs of its new billing system across regulated and non-regulated service contracts using customer numbers as the appropriate cost allocator.

In general, stakeholders were concerned about the high overall cost (in opex and capex) associated with the billing system, as well as the approach to allocating these costs to schemes and individual customers.

Build costs

The need and timing of expenditure associated with the new billing system and CRM was reviewed. It was concluded that there was a need to replace Sunwater's previous billing system and implement a customer records management (CRM) solution, as the previous billing system was at the end of its useful life and was being withdrawn from the market by the vendor, and Sunwater's CRM capability was inadequate. It was also noted that a new system would address:

- technical and cyber risks identified by Sunwater, which required active management, mitigation and monitoring by the ICT Operations team
- compliance risks with relevant legislative and regulatory requirements.

QCA assessed the project to be prudent as:

- the previous billing system came to the end of its useful life in the previous price path period and was being withdrawn from the market by the vendor
- Sunwater had limited capability in relation to CRM under the previous system
- the project addresses technical and cyber risks, and compliance risks relating to relevant legislative and regulatory requirements.

However, QCA did not consider that the cost of the project is efficient. Specifically, it noted AtkinsRéalis's assessment that there were significant weaknesses in how this project was managed from an options assessment, budgetary, procurement and governance perspective.

QCA also noted that the build cost for the project has changed significantly since the need was first identified, from an initial forecast of between $0.5 million and $1 million, to the present estimate of $38.6 million, with little indication of a budget limit or value for money assessment informing the evaluation process during this time. It noted that Sunwater appeared to have significantly underestimated the required cost initially, due to a lack of relevant expertise. As relevant expertise was brought onto the project, the project cost evolved to an estimate of $18.5 million in January 2022. AtkinsRéalis considered the January 2022 cost estimate of $18.5 million (2022–23 dollars) to be appropriate noting that it:

- represents the approved value before inefficiencies and omissions in Sunwater's management of the project were identified, leading to the escalation in cost.
- is at the upper end of the range of publicly available costs for similar implementations.
- reflects a reasonable cost per customer to implement a project of this type, for a water utility of the size and customer base of Sunwater.

QCA considered the cost estimate of $18.5 million appropriate as it removed costs that could have been avoided with better scoping and reflects the costs of similar implementations for water businesses with the size and customer base of Sunwater.

QCA considered that treating the build cost as capex is consistent with standard regulatory practice in that Sunwater is incurring high upfront costs to generate a product that provides a service over multiple years. It also noted that while this project was not included as part of Sunwater's cost proposal for the 2020 review, Sunwater treated all other SaaS build costs in the 2020 review as capex, based on accounting standards at the time.

Taking these factors into consideration, QCA considered there was merit in treating the build cost as capex. As with its general approach to ICT capex, it considered it appropriate to amortise these costs and recover them through corporate overheads. It was noted that this is the approach adopted by Sunwater for all other non-infrastructure capex.

For the purposes of this review, Sunwater proposed a change to the cost allocation methodology. Specifically, Sunwater proposed that the capital and operating costs associated with CASPr, be allocated based on customer numbers rather than direct labour costs. However, QCA found this proposed allocation approach differs from the treatment of its current billing system and is also not consistent with the treatment of other information and communication technology (ICT) costs. QCA considered it appropriate to use direct labour costs, pending a comprehensive review by Sunwater of its cost allocation approach.

QCA considered 15 years to be an appropriate asset life, since this aligned more closely with the length of time that the current billing system has been operating and to also account for the uncertainty in the SaaS operating model for this system.

The annuitised build costs are $1.7 million per annum. QCA offset this by the $2 million in savings arising from the decommissioning of the Orion billing system, resulting in a net saving of $0.3 million per annum.

Sunwater's response

Sunwater responded to QCA's draft position on Sunwater's investment in the CASPr ICT system, including the decision to reduce the capital cost to $18.5 million and reject Sunwater's proposed recovery methodology. Sunwater responded to the arguments in the AtkinsRéalis analysis and presented an alternative solution for determining the level of capital cost to be customer funded.

Sunwater also responded to the recovery methodology and rejected QCA's treatment of ongoing costs and offsets on the basis that the approach used by AtkinsRéalis is flawed and not supported by evidence.

There is agreement between QCA, AtkinsRéalis and Sunwater that CASPr is a necessary investment that will provide tangible benefits to customers. It is also agreed by QCA, AtkinsRéalis and Sunwater that the CASPr detailed business case is reasonable, as evident from AtkinsRéalis conclusion that the detailed business case is "a reasonable document in terms of setting out future activities, risks and the breakdown of costs."

Sunwater's response asserts that QCA has accepted the AtkinsRéalis review of the capital investment and imposed the superseded and out-of-date capital cost amount of $18.5 million on CASPr. Sunwater's view is that this capital cost represents a scope of works that will not deliver the necessary, tangible benefits to Sunwater's customers. Sunwater stated that it cannot support this decision and that it seeks a QCA final position that is aligned with the value contained in the detailed business case.

Sunwater sets out that it aims to be constructive by proposing a reasonable and justifiable solution and not seeking to recover costs incurred until the middle of 2022, covering the period when its management of the project is alleged to have been inefficient. This results in Sunwater bearing $3.6M of costs. Sunwater therefore seeks to recover $34.9M from customers.

Our view

Sunwater's response does not provide new evidence beyond drawing our attention to the Platypus billing and collections system implemented by City West Water. However, it has contested our understanding, or lack of, and analysis notably of solutions development and procurement underpinning our findings.

In light of the challenges made by Sunwater, we sought a second opinion from other specialist IT consultants in our business with a track record of implementing software solutions with multiple clients and across multiple sectors. Our views captured below therefore reflect both the original team's views combined with insight and experience from beyond the review team.

Key excerpts from Sunwater's response are captured below (or alternatively for the complete text revert to Sunwater's response) alongside our views.

Misunderstanding of the scope of the project

> Sunwater states: *There appears to have been some confusion regarding the breadth and functions of the CASPr system, which has led to inaccurate framing and benchmarking of the solution. Both QCA and AtkinsRéalis have repeatedly referred to CASPr as a 'billing system', which dramatically understates its utility, functions and criticality to Sunwater's operations.*
>
> *To address that misunderstanding, Sunwater has set out the elements of the CASPr system, the multiple functions it will perform and the integrations it will require. Understanding the function and detail of the CASPr system is critical because misframing has, in part, led to unjustifiable decisions regarding the acceptable capital cost and how recovery should be managed.*

We do not agree with these statements. There was no misunderstanding on our part about the scope, functions and detail of the CASPr system and our analysis was not based on categorising CASPr as *only* a billing system. We consider that our report clearly set out accurately from the outset what was being delivered and there are no references to CASPr as a standalone 'billing system'[21].

[21] A word search demonstrates that there were only two references which included the term 'billing system' and they were not standalone references as suggested by Sunwater. These were on page 106: "Need: We concur with the need for replacing **the billing system and implementing a CRM solution**. However, we are not satisfied it is being

Early management resulted in inefficient outcome

> *AtkinsRéalis stated on page 124 of their report: "We are recommending that the regulated value for the build costs should be reduced to the January 2022 value of $18.5m (2022-23 dollars) across regulated and non-regulated customers…..The logic of this statement and recommendation is flawed and demonstrates a misunderstanding of the iterative nature of ICT developments.*
>
> *At the core of the arguments presented by AtkinsRéalis appears to be the position that if Sunwater had fully grasped its commercial and operational needs from the outset, it would ultimately have resulted in a project cost of $18.5 million. This is not credible or supported by evidence.*
>
> *Sunwater has acknowledged in its submission, evidence and interviews that the early stages of the CASPr needs and project investigation were not perfect. However, there is no evidence to suggest these early challenges resulted in sub-standard outcomes or project selection. In fact, AtkinsRéalis acknowledged that the detailed business case – which it should be noted set the project cost at $38.6 million – is valid and reliable.*
>
> *…AtkinsRéalis was highly critical of the Expression of Interest (EOI) process, length and market engagement. However, AtkinsRéalis also acknowledges that the EOI process produced 17 market submissions, which were then narrowed down to a shortlist of eight for further assessment. It is not realistic to suggest there are significantly more than 17 vendors that would be able to put forward a credible submission to deliver a multifaceted ICT system, and comply with the procurement, legal and financial requirements necessary to work with a government-owned corporation. This example attests to AtkinsRéalis's tendency to make unsubstantiated criticisms without understanding the limitations of the Australian and Queensland market.*
>
> *Sunwater's proposed solution Sunwater submits that the detailed business case does set out a robust process for project selection, development and ultimate decision-making for Sunwater and its customers.*

We concur that it is the management of the project in the early years, [redacted], which underpin our findings.

[redacted] This is not the same as us acknowledging *"that the detailed business case – which it should be noted set the project cost at $38.6 million – is*

---

delivered in a prudent and efficient way and that a better value option was not possible"; and also on page 115: We concur with the need for **replacing the billing system and implementing a CRM solution**. The billing system was at the end of its useful life and was being withdrawn from the market by the vendor and Sunwater's CRM capability was very basic". Bold added for emphasis.

valid and reliable". [redacted]

We accept that the length of the EOI period did not materially impact on the process as the 17 proposals received within this period did mitigate this. [redacted] Inviting a wider range of potential solutions to tender could in all probability have allowed for a better exploration of the options available in the market, increased competition and promoted better value for money.

We see no evidence that this is to do with the limitations of the Australian and Queensland market.

Iteration in ICT projects

> *….. The capital cost review is not supported by evidence and fails to acknowledge/accept the iterative nature of ICT investment and integrations in customer-focused organisations……the development of an ICT system of this nature is iterative. It requires a multistage discovery process that spans a significant time period.*
>
> *During the discovery process, it is necessary to understand the nature of the organisational need, customer requirements, internal stakeholders and the many parts of the organisation that will be impacted and require integration. Sunwater undertook this discovery process and learnt more about organisational needs, market offerings and customer requirements.*
>
> *Sunwater acknowledges that management of the project development process was not perfect during its early stages (this is discussed further below). Despite this, the discovery process was still highly valuable and resulted in Sunwater building its understanding of needs, offerings and requirements.*
>
> *Far from reflecting poorly on management, the iteration of the project described by AtkinsRéalis, and expanded on its report, demonstrates that the project developed over time and management was sufficiently agile to manage the project as it developed.*
>
> *Sunwater notes that Greater Western Water (GWW) experienced similar project iterations in the design and development of its 'Platypus' billing and collections system. The Platypus billing and collections system is currently under development by GWW, and has been subject to multiple cost changes as the project was scoped and better understood.*
>
> *The Platypus billing and collections system was originally proposed in City West Water's 2018 Pricing Submission at a capital cost of $15 million. Further investigations, increased understanding and project iterations led to an increased cost of $62 million (+/- 20 per cent) in GWW's 2022 pricing submission. The Platypus project continued to iterate and evolve and, as a result, the price submitted by GWW in the 2024 pricing submission was $92.53 million (nominal). This example also contradicts AtkinsRéalis's assertion that CASPr cost is at the upper end of the range of publicly available costs for similar implementations.*

We agree that the development of major projects, including ICT projects, is an iterative process. [redacted]

Costs jumped up significantly at key points in the project development [redacted]

Table 4-1 – CASPr Build and Ongoing opex costs during project lifecycle ($M)

Date	June 2020	June 2020	October 2021	January 2022	March 2023	November 2023
One-off build costs	$0.5M to $1M	$3M	$15.8M	$18.5M	$39M	$38.6M
Ongoing opex	Not discussed	Not discussed	$1.3M	$1.4M	$1.6M	$1.7M

The near doubling of costs from $18.5M to $39M did not relate to changes in the elements of the CASPr system and its multiple functions, which had been clearly set out and established at an early stage. The increase in costs can be directly attributable to the implications of all the interconnectivity related works, and the actions it was subsequently decided needed to be taken to reduce risks. This was not simply another iteration of the project. [redacted]

It does not appear that there was a constrained budget for CASPr. There was no evidence in any documentation that there was ever a budget envelope set for this project. It is unclear if or what would have been a tipping point to halt or revisit the project. We do not believe this represents good practice or good governance.

We do not believe that Sunwater's citing of an example of another water utility in Australia that has seen step changes in its costs provides justification for Sunwater's investment. On the contrary, we have experience of many examples of other major ICT projects in Australia and in other countries that have delivered on or close to their agreed budgets.

In addition, Greater Western Water is a qualitatively different type of utility to Sunwater. Sunwater serves just over five thousand irrigation customers and is a bulk water supplier while GWW is an urban water utility which services over 550,000 residential customers and more than 45,000 business customers. In its own benchmarking analysis that Sunwater undertook in its pricing proposal it was noted that its *"…needs were substantially different to that of a standard value chain for an urban water utility"*. For other examples to be directly relevant, they would need to be similar types of utilities to Sunwater undertaking a like for like project.

Cost per customer

> *Sunwater also rejects the notion that affordability on a cost-per-customer basis is relevant to the selection of a solution designed to meet service and compliance obligations. This hurdle is not defined in the QCA's guidance and should have no bearing on the assessment of this project.*

Sunwater proposed that the capital and operating costs associated with CASPr should be allocated based on customer numbers (rather than direct labour costs). However, at no point during the entire development of the project costs was there any consideration of the cost per customer. Our analysis estimated that these costs would equate to in excess of $800 per year over an assumed 15 year asset life.

Table 4-2 - CASPr total expenditure and per customer estimate (FY23)

Expenditure type	Total	Per Customer
One-off build costs $	$39.0M	$7,623 (or $508 per year over 15-year asset life)
Ongoing opex $	$1.6M	$315

Source: CASPr Detailed Business Case for costs and analysis of customer numbers in Annual Report Scheme Statistics (2023)

We do not agree that bill impact per customer is irrelevant. Part of the assessment of the strength of a business case should consider the costs per user or customer, and the ability to recover those costs. This is good practice in business planning rather than an area which we think requires definition in an economic regulator's guidance.

We have carried out price reviews throughout Australia and it is standard practice to consider bill impacts, including whether expenditure can be avoided or at least pushed back to subsequent price paths, in order to flatten the impact on customer bills.

Conclusion

> *Sunwater submits that QCA should determine the CASPr capital cost of $34,878,332 may be recovered by Sunwater as the prudent and valid project cost. This represents the detailed business case project cost forecast less actual costs for 2020-21 and 2021-22.*

Our view remains unchanged from our original findings. The only new evidence provided by Sunwater relates to the Platypus billing and collections system implemented by City West Water and we have set out why we do not think this is applicable or relevant.

We consider the significant weaknesses in how this project was managed [redacted] led to the selection of much more costly solution and which does not represent efficient expenditure.

We consider that a number of factors lead to a less efficient solution than should have been the case. [redacted]

[redacted]

4.2 Ongoing CASPr costs

QCA Draft Report

In its November 2023 submission, Sunwater proposed an average step change of approximately $1.6M p.a. in nominal terms or $1.4M in $FY23 starting from [redacted] onwards. This is based on an average $1.9M nominal expenditure and a $0.3M saving from existing systems which are no longer required as a result of the new system.

In our report, we set out our understanding that the likely savings from retiring the existing systems are likely to be closer to $0.7M p.a. based on retiring the Orion and Freshdesk systems and savings associated with no longer having to maintain the existing Portal.

We stated that we do not consider redeployment is, in itself, a reason to recommend an increase in expenditure in response to Sunwater's explanation that its savings would be $0.5M p.a. rather than $0.7M p.a. because of "internal support costs that related to providing hyper-care to Orion. While the activity is no longer required, the time will be redeployed elsewhere within the program".

We also recommend a further reduction of $0.3M (in $FY23) to reflect the labour-related efficiencies which Sunwater expects to be realised but assumed to start in [redacted] when the system comes live.

In its Draft Report, QCA proposed applying these additional savings ($0.4M from no longer having to maintain existing systems and reduced support labour costs of $0.3M related to the previous Orion billing system).

Sunwater's response

In its response, Sunwater asserts that the further reductions we recommended require revision because they:

- *incorrectly assert that a redeployment would result in an increase in costs of $0.2 million*

- *incorrectly identify a further $0.3 million in labour savings, which was an amount that is unsubstantiated and ignores AtkinsRéalis's own statements regarding the ICT efficiencies already achieved by Sunwater.*

On the point about redeployment it adds that *"$0.2 million of previous Orion-required labour resources were being used in the ICT program management. This is entirely appropriate and must be considered in the context that Sunwater has achieved highly significant ICT management efficiencies and reductions in ICT totex expenditure for the forward price period…*". It stated that we had *"incorrectly suggested that this labour utilisation was being used as the sole reason for an increase in expenditure. This is not supported by evidence. Sunwater had stated accurately that this resource was being utilised in ICT program management and there is no saving available."*

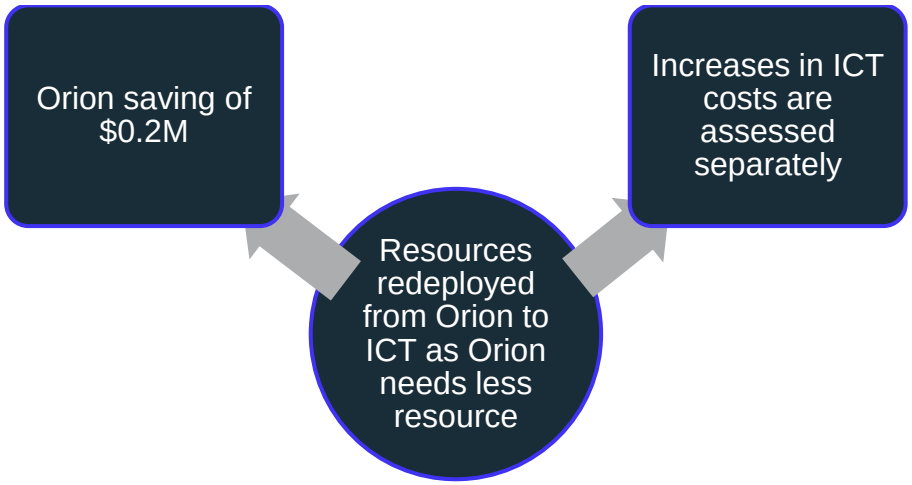
On further labour savings, it asserted that its approach is *"a reasonable, identified saving on the basis that the CASPr system will be a multi-function system. As identified by AtkinsRéalis, many of these systemised functions will be new for Sunwater and will require resources to ensure their efficient and effective operation".*

It stated its view that we had *"shown flawed logic by suggesting that, simply because a new ICT system is in operation, reasonable human resources will not be required to ensure its proper operation. Sunwater had already examined the new system and identified a resource efficiency of two FTEs. AtkinsRéalis decided, without providing reasons or analysis, that this was too conservative and suggested that this saving should be five FTEs."*

Our view

We understand Sunwater's view and comments about redeployment. However, we consider that it misunderstands the logic behind our proposed adjustment which we provide further explanation of below.

Figure 4-2 - Orion redeployment adjustment



Irrespective of where the resources were redeployed to, the retirement of the Orion system has led to a saving of $0.2M with resources deployed elsewhere. In its response Sunwater does not dispute that $0.2M of costs has been removed from the Orion system.

To argue that the redeployed costs should not be netted off as an offsetting efficiency is effectively to argue that ICT costs should be increased by $0.2M. This is illustrated by the thought-experiment of assuming that the $0.2M of resource is redeployed to the ICT program but only used to deal with attrition in the ICT team. In this example, the costs of the Orion system (reduced by $0.2M) and ICT costs (no change) reduce by $0.2M overall. Hence the argument for redeployment not to be netted off is effectively an argument for increased ICT expenditure.

We have assessed the costs of the ICT program separately as set out in Section 3.3.2.1 of our report and concluded that the increases are largely endogenous with the exogenous elements relate to cyber security, estimated to be 10% of the increase in ICT expenditure.

It appears that Sunwater has misunderstood our recommendation in terms of resource efficiency. We assumed an efficiency of three FTEs (not five). Our reasoning was based on Sunwater's two FTEs and we assumed only one more FTE saving, which is very modest, as a result of the combination of CASPr, other improvements in both the customer journey and deployment of technology as well as revisiting the Business Unit structure. As stated in our report, the $0.3M was derived based on the assumption of $100k costs per FTE.

In addition, we brought forward the benefits realisation from CASPr to [redacted] rather than Sunwater's overly conservative estimate of [redacted]. We could see no evidence or reasons why it would take three years to realise benefits from the go live date in [redacted]. In our experience of similar implementations, we think six to twelve months to bed in and realise the benefits is reasonable – more often than not we see business cases which suggest immediate benefits realisation which we normally challenge as overly optimistic and in stark contrast to the relatively very modest and slow forecast proposed by Sunwater.

4.3 Cost treatment

QCA Draft Report

In our report, we noted that one of the main reasons that CASPr is being implemented is to replace the Orion system which attracted an amortisation charge of approximately $2.0M p.a. (in $FY23). As our recommended net cost (amortisation and recurrent costs) of CASPr was very similar to the saving due to the expiry of the system which it is replacing, we did not recommend a step change associated with the implementation of CASPr.

We also found that Sunwater's proposed treatment of CASPr was not consistent with other ICT or any other non-direct costs. It was not clear to us that a piece-meal approach to amending the treatment of a single corporate project is appropriate and results in a more causal allocation.

We found that it would be more appropriate to carry out changes to cost allocation more broadly so that the aggregate effect is stronger causality and therefore recommended applying the current approach to incorporate the impact of CASPr costs until a more causal allocation approach is in place.

We proposed a 15 year asset life given the significant uncertainty associated with SaaS (software as a service) solutions in terms of the length of time they will be supported and/or whether new versions that are released will be compatible with the existing configurations and customisations.

In its Draft Report, the QCA proposed applying the current approach to incorporating the incremental impact of the costs of the new billing system until a more causal cost allocation approach is in place. It used an asset life of 15 years to derive the annuitised build costs for CASPr.

Sunwater response

Sunwater's response addresses two points related to cost treatment: firstly the cost allocation and recovery and secondly the approach to the depreciation offset and annuity calculation. These are summarised below.

Cost allocation and recovery

In its response to the Draft Report, Sunwater notes QCA's stated desire for Sunwater to improve the causal alignment between costs and recoveries across its portfolio stating that its proposed approach is overtly causal, stating:

> *The proposed capital cost recovery methodology for CASPr is overtly causal and aligns with QCA's approach. Sunwater acknowledges further work will be required in future across the full portfolio to increase causal recovery, but that is not a valid reason to reject Sunwater's approach to apply a casual methodology where it is available, as it is here. This is a significant investment and will require Sunwater to utilise debt to fund this investment.*
>
> *Given the scale, complexity and scope of the CASPr project, it is appropriate that it be treated as a capital project and subject to ex-post review. It is an unacceptable risk to Sunwater that a project of this scale cannot be subject to recovery of actual costs.*
>
> *Allocation using the HUF is not inconsistent with the recovery of metering costs. Treatment as a corporate overhead will lead directly to under-recovery of this critical project. This is not appropriate and runs counter to the regulatory principle of user pays.*

It also took issue with our statement that Sunwater's *"proposed treatment of CASPr is not consistent with other ICT (or any other non-direct) costs. If amending the treatment of one corporate project, why not others?"* stating

> *This question suggests that AtkinsRéalis has misunderstood the nature of the CASPr system, which is a tool that will provide multiple customer-specific benefits and directly interface with customers about allocations, purchases and stakeholder management issues. The CASPr system, subscriptions, interfaces and integrations all relate to customer requirements and are distinguishable from other, internally focused ICT systems.*
>
> *On this basis, it is appropriate and reasonable that all customers share in the costs of the CASPr system.*

Depreciation offset and annuity calculation

Sunwater disputes the amount of depreciation associated with the Orion system and states that it has not been included in the forward price period:

> *Depreciation was between $1.6 million and $1.7 million each year for the eight years ended 2021-22 for asset capitalisation of the Orion billing system. The amount was not $2 million annually and it ended in 2021-22.*
>
> *An annual depreciation amount for the Orion billing system has not been included in the forward price period.*
>
> *There is no available amount in the forward price period that can be used as an offset. If the annuity methodology is used (Sunwater opposes this, see **Section 5.3**), the full $3.1 million should be recoverable*

It reiterates the point stating that

> *Table 13 of the Draft Report clearly shows QCA has offset the CASPr cost by $2 million annually for "reduction in savings for Orion end-of-life". However, this depreciation amount ended in 2021-22 and is not included in the forward price period. It is not available to be used as an offset.*
>
> *Further, we note that the amount has been overstated as $2 million annually, which is not supported by the evidence.*

Our view

Cost allocation and recovery

We understand Sunwater's assertion about its proposed approach to allocating CASPr costs being overtly causal. However:

- Changing the approach to allocating the costs of a single project does not mean that the total non-direct costs allocated to different schemes or customers becomes more causal. This is particularly the case where it replaces an existing cost (Orion) which is allocated in a different manner.

- An example of this is illustrated in Table 3-19 of our report. As modelled, the overall impact of moving to a more causal approach would have been to reduce the corporate costs allocated to regulated schemes in recent years. This suggests that the current basis of allocation assigns too high a proportion of corporate costs to regulated schemes. Layering Sunwater's proposed approach to allocating CASPr costs on top of this would add to (because it replaces Orion) rather than mitigate this effect.

- There is a second related reason to be wary of just amending cost allocation for a single project. This relates to the potential for selection bias i.e. the reasons that this project has been selected for different treatment to other non-direct costs. These reasons may be the fact that it is a new high-profile project or one that Sunwater considers should be allocated on the basis of customers.

- Sunwater makes the case that this project should be allocated on the basis of customer numbers. This tends to increase costs for regulated schemes. However, there may be other ongoing costs which, if examined in more detail, should have a higher allocation to non-regulated schemes or major projects. By only amending the allocation for one cost because it is high-profile and not examining the others there is a risk that we further bias the overall allocation of costs.

We do not consider that we have misunderstood the nature of the CASPr system. The text Sunwater quotes relates to the principles of it being preferable to undertake a broader review of cost allocation rather than piece-meal allocation of a single high-profile project. This view is consistent with the point made above.

We also consider that, whilst we consider improvements should be made to improve the causality of cost allocation, our recommendations are not inconsistent with the principles of user pays and all customers sharing the costs of the system given that corporate costs are currently allocated as an uplift on direct labour costs.

Depreciation offset and annuity calculation

As explained in our report, we have considered the justification or otherwise for endogenous costs above the cost envelope set by QCA in its 2020 report.

The offset we recommended for the end of the Orion system is based on the fact that this charge was included in the costs assessed by the QCA in making its 2020 recommendations. We therefore consider it appropriate to examine the change in costs by comparing the proposed CASPr costs with those associated with the Orion system which is being retired as CASPr is implemented.

In its response, Sunwater quotes depreciation charges of between $1.6M and $1.7M p.a and states that it was not $2M. The figures of $1.6M and $1.7M quoted by Sunwater are consistent with our understanding of the depreciation charges[22]. However, it is important to note that these figures are in nominal terms. As highlighted in

[22] E.g. based on the figures in Sunwater's spreadsheet "RFI_68_QCA RFI data labour charging (2)" for depreciation against code 661.

our report, the cost savings we quote are in $FY23 terms. When converted to $23, the FY19 and FY20 Orion depreciation charges are both equal to $2.0M.

We therefore consider that:

- It is reasonable to compare the costs of CASPr to the cost of Orion which were part of the costs considered by QCA in forming its 2020 recommendations.
- The depreciation charge being incurred by Sunwater at the time of the QCA 2020 recommendations was $2.0M in $FY23 terms.

As such we are not in a position to amend our recommendation as a result of Sunwater's comments in this area.

5. Renewals and Capex

5.1 Direct labour

QCA Draft Report

In its Draft Report QCA noted that the direct labour percentage forecast by Sunwater is significantly higher than historic (2020 to 2023) direct labour percentages and made an adjustment to the indirect costs allocated to forecast renewal expenditure from that proposed by Sunwater of 26% to 12.1%, with the latter calculated based on an average of direct labour costs from the four previous years (2019/20 to 2022/23).

Sunwater response

Sunwater's response raised two points: the first is that Sunwater now has more recent data (2024) for historical renewals that was not previously available and this would result in a change from 12.1% for direct labour costs as determined by QCA for the Draft Report to 12.85%, the following figure shows the direct labour percentages now with 2024 data.

Figure 5-1 - Sunwater's recalculation of the direct labour percentage, 2020-2024

	2020	2021	2022	2023	2024
Labour	2,653,637	2,992,139	3,341,108	2,733,249	4,290,117
Overhead	3,333,497	4,514,224	5,347,122	4,255,748	6,564,327
Indirect	1,574,382	2,144,123	1,717,264	1,161,140	1,401,687
Consultants and contractors	13,868,102	19,149,351	22,673,654	22,145,550	18,225,647
Materials	1,164,971	1,263,054	1,743,626	2,257,589	2,759,719
Other	396,493	631,620	1,045,574	1,259,602	1,728,896
Total	**22,991,084**	**30,694,510**	**35,868,347**	**33,812,877**	**34,970,394**
Average (labour/direct costs)	**14.67%**	**12.45%**	**11.60%**	**9.63%**	**15.89%**

Source: Table 12, Sunwater Response document (Nominal $000s)

The second point raised by Sunwater is that the approach of averaging the total values for indirect labour across the years does not account for larger sized projects that will have a lower proportion of direct labour than smaller projects, and that the direct labour costs of 12.1% determined by QCA for the Draft Report is driven by a relatively small number of very large projects with small direct labour costs as a percentage of the projects' total direct costs.

Sunwater's response indicates that approximately half by value (and over 97% of projects by count) of historical renewal projects for 2020 to 2024 are below $300,000 and Sunwater calculated the average portion of direct labour for these projects as 44%.

Figure 5-2 - Sunwater's direct labour rates for historic renewals by size, 2020-2024

	Small projects	Medium projects	Large projects	Very large projects
Minimum	$0	$300,000	$750,000	$1,500,000
Maximum	$300,000	$750,000	$1,500,000	$10,000,000
Percentage of direct labour	44.4%	10.7%	3.4%	3.0%
Percentage of total projects	97.5%	1.8%	0.4%	0.3%
Average of direct labour as a percentage of total value	52.4%	19.5%	8.9%	19.2%

Source: Table 13, Sunwater Response document (Nominal $000s)

Sunwater applied the percentage of direct labour from its historical renewals programme by project size to derive direct labour values for its future renewals for the period 2025 to 2029, this results in an average of 23.4% for direct labour costs as shown in the following figure.

Figure 5-3 - Sunwater's application of historical rates to future renewals, 2025 to 2029

	Small projects	Medium projects	Large projects	Very large projects	Total
Percentage of direct labour	44%	11%	3%	3%	23.4%
Value of projects	$38,925,616	$23,111,545	$18,175,424	$7,676,304	$87,888,890
Value of direct labour	$17,284,594	$2,471,962	$617,716	$227,079	$20,601,350

Source: Table 14, Sunwater Response document (Nominal $000s)

Our view

We consider that it is not unreasonable to assume that different sized projects may have different direct labour percentages of total project direct costs, as we understand Sunwater will typically deliver smaller sized projects using internal labour and larger more complicated projects with a greater share of external labour.

In reviewing Sunwater's analysis we note the following:

- When calculating the average direct labour cost for each project size Sunwater has worked out the direct labour percentages for each historic project from regulated schemes and then taken a simple (i.e. unweighted) average of these project percentages. We consider that a more appropriate approach is to derive a weighted average figure. This results in a direct labour percentage that is more in keeping with recent historical data as can be seen below.

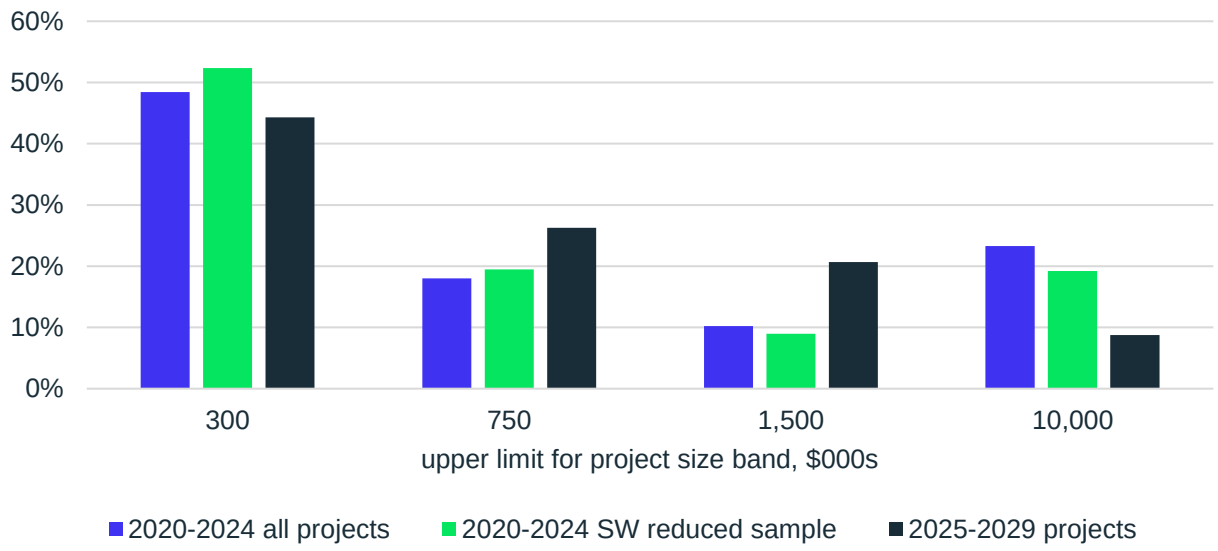
Table 5-1 - Historical renewal projects (2020 to 2024) by different project sizes – weighted average approach

	Small projects	Medium projects	Large projects	Very large projects	All projects
Min project size	$0	$300k	$750k	$1.5M	
Max project size	$300k	$750k	$1.5M	$10	
Sunwater's historical renewals sample from regulated schemes					
% of direct labour	22.1%	10.3%	3.1%	2.6%	**14.4%**
All historical renewals from regulated schemes[23]					
% of direct labour	20.3%	11.5%	3.7%	1.6%	**12.6%**

Analysis of Sunwater spreadsheet 'PostRFI3_OH in renewals – to QCA – 24 Sep 24'

- Reviewing the data for historical and future renewals the project distribution does not show a marked increase in small projects between the future and historical projects (indeed it suggests a reduction). It also appears that the reduction in 'very large' projects is reflected by increases in large and medium sized projects as can be seen in Figure 5-4.

Figure 5-4 – Proportion of direct costs falling within each project size band



Analysis of Sunwater spreadsheets 'PostRFI1_Updated WMS File with New Capitalisation Policy' and 'PostRFI_3_OH in renewals – to QCA – 24 Sep 24'

Having reviewed the data provided we agree that different sized projects appear to have had different direct labour percentages with smaller projects appearing to have a higher proportion of direct labour costs. However, we consider an approach where values are averaged within each project size (i.e. weighted average) is more appropriate than an average of the percentages (i.e. unweighted average). Using such an approach and applying the direct labour percentages derived by Sunwater from Table 5-1 against the forecast renewals for 2025 to 2029

[23] Sunwater's analysis appears to exclude zero and negative direct cost projects as well as 810 projects with positive direct cost values. We have included all of these lines in our analysis of 'all historical renewals'

results in a small change of the direct labour percentage across all projects to 13.4%, if all historic renewal projects are included in the analysis then a direct labour percentage across all projects is 12.9%.

Table 5-2 - Applying historical direct labour rates to projects for FY26 to FY29 ($M)

		Small project	Medium project	Large project	Very large Project	All projects
	Value of projects	$38.9	$23.1	$18.2	$7.7	$87.9
Using Sunwater's sample of historic renewal projects for deriving direct labour %s	Percentage of direct labour	22.1%	10.3%	3.1%	2.6%	13.4%
	Value of direct labour	$8.6	$2.4	$0.6	$0.2	$11.7
Using full sample of historic renewal projects for deriving direct labour %s	Percentage of direct labour	20.3%	11.5%	3.7%	1.6%	12.9%
	Value of direct labour	$7.9	$2.6	$0.7	$0.1	$11.3

Analysis of Sunwater spreadsheets 'PostRFI1_Updated WMS File with New Capitalisation Policy' and 'PostRFI_3_OH in renewals – to QCA – 24 Sep 24'

We have considered if we should amend our recommended renewals expenditure as a consequence of the additional information provided by Sunwater. We consider that:

- There is inevitable uncertainty in the shape of the program which will be delivered. This analysis has been (necessarily) carried out using ex-ante estimates with the uncertainty this brings.
- It appears that the shape of the program (project sizes) as proposed by Sunwater is broadly similar to recent trends. If anything there appears to be less of a focus on smaller projects which are the projects with the highest proportion of direct labour.
- This analysis has been carried out using the size bands adopted by Sunwater. If different size bands were used it is likely that a different direct labour % would be derived.
- The effect of moving from the historical average used in QCA draft report to a new approach would be relatively minor.
- There are no compelling reasons to expect the future to be materially different to the average of the recent years.
- If we were to use the most recent data points (e.g. FY22 and FY23) the proportion of direct labour is lower than the figure of 12.1% used in our report.

Overall, we consider that the historical analysis used as the basis of the QCA's draft report proposal is reasonable for use in setting an ex-ante allowance and that this has been further supported by this analysis.

5.2 Cost recovery rate

QCA Draft Report

The QCA draft report proposed cost recovery rates (i.e. uplifts on direct labour charges) of 98% for corporate overheads, 52% (average) for local overheads and indirect costs of 46% of bulk schemes and 35% for distribution schemes. These are applied to the direct labour cost component of recommended renewal expenditure.

Sunwater response

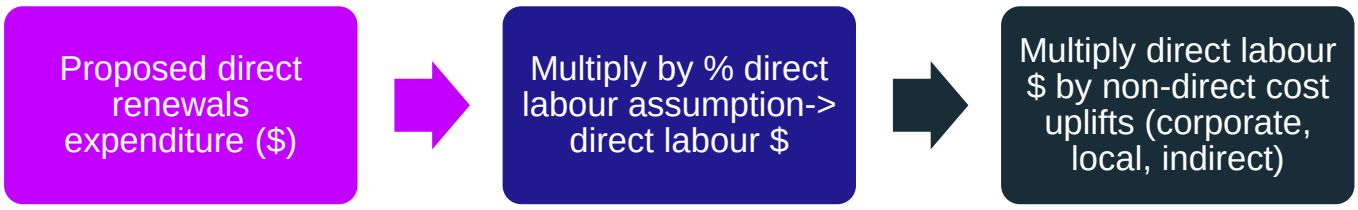
In the renewals expenditure section of its Response, Sunwater states that it *"supports, in principle, the change to the rate when QCA adjusted the indirect and overhead costs"*. However, it also states that *"As set out in the previous section, QCA substantially reduced forecast direct labour. Sunwater asserts that if QCA wishes to alter the direct labour forecast, the updated cost needs to be re-inputted into the cost recovery rate calculation…. If this is not done, indirect and overhead cost reduction will be much greater than the four per cent inefficiency identified."*.

Our view

Sunwater's approach

In deriving the non-direct cost element for its proposed renewals programme Sunwater has used the approach of firstly deriving total direct renewals cost estimates, multiplying this by an assumed labour cost percentage and then applying uplifts to these estimated labour costs for non-direct costs as summarised below.

Figure 5-5 - Sunwater's approach to deriving the non-direct costs of future renewals



Source: Analysis of Sunwater spreadsheets such as 'RFI_50 - Renewals Expenditure.xlsx'

The direct labour percentages are discussed in an earlier section. This section deals with the non-direct cost uplifts i.e. the step shown in the right hand box in Figure 5-5. The assumptions made by Sunwater are summarised below.

Table 5-3 – Summary of Sunwater's non-direct cost labour uplifts

	Corporate	Indirect	Local overhead
Sunwater overhead calculations ***'RFI_68_QCA RFI data labour charging (2)'*** *based on v2200 for FY23*	95% (FY23 and all future years)	46% for bulk supply Schemes in FY23 then: • 90%, 84%, 39%, 50%, 78%, 48%, 23% yearly values from 2024 to 2030	64% (average of Operations North, Central, Bundaberg and South) of which: • North & Central: 65% (2023-27) then 58%

"A01-Hub_2242"(SFM v 2243) for other years		35% for distribution schemes in FY23 then: • 65%, 36%, 28%, 28%, 59%, 29%, 21% yearly values from 2024 to 2030	• Bundaberg: 60% (2023-27) then 55% • South: 70% (2023-27) then 90%
Comment	The rate is an input assumption (i.e. an applied rate)	Output from a calculation- varies with each SFM model	This is a series of input assumptions

Source: Analysis of Sunwater spreadsheets 'RFI_68_QCA RFI data labour charging (2)' and 'A01-Hub_2242"'

Approach taken in our report

We adopted the following approach to deriving future labour cost recovery rates for renewals in our report, using the actuals from FY23 as the basis of our analysis as summarised below.

Figure 5-6 – Our report approach to deriving non-direct labour uplifts for renewals

This process resulted in the following recommendations:

Table 5-4 - Summary of our report recommended non-direct cost labour uplifts for renewals expenditure

	Corporate	Indirect	Local overhead
Sunwater FY23 rate	95%	46% for bulk supply Schemes 35% for distribution schemes	64% (average of Operations North, Central, Bundaberg and South)
Recommended adjustment to Sunwater proposed non-direct cost rates (from Table above)	103%	100%	81%
Recommended labour uplift rate	**98%**	**46% for bulk supply schemes** **35% for distribution schemes**	**52%**

Source: Table 3-22 of our report

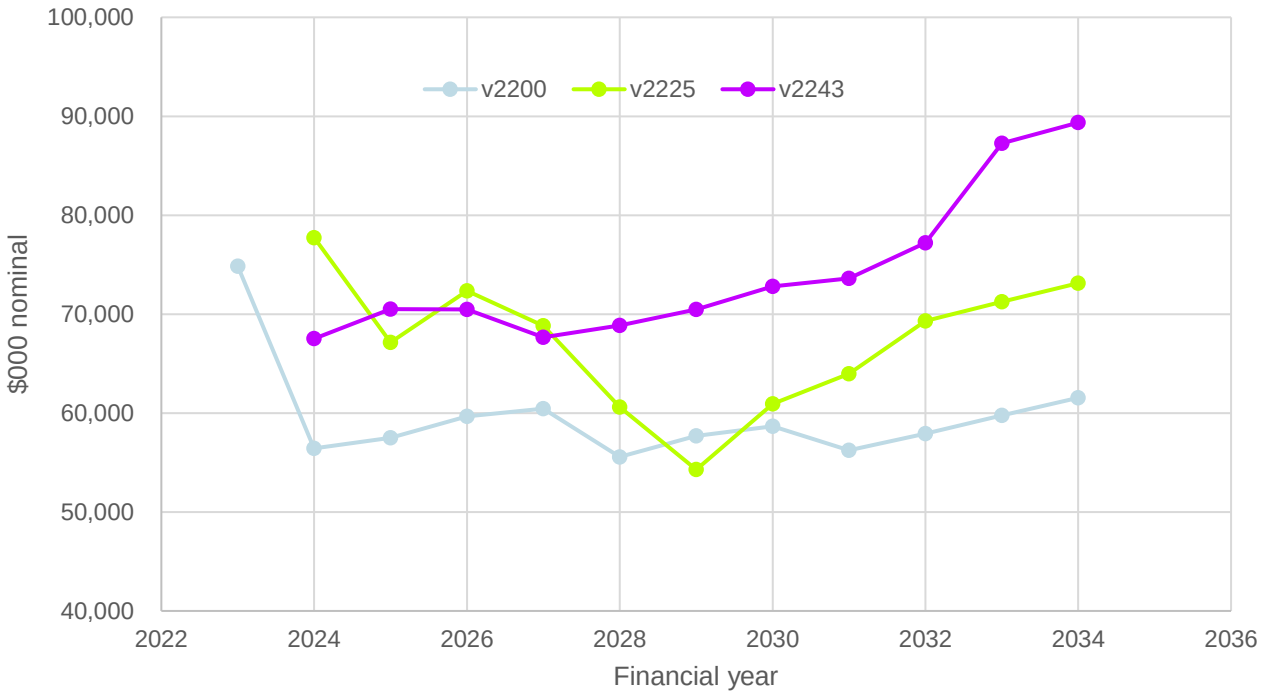
We explain below why we chose this approach. In particular we address why we used FY23 actuals as the basis of our recommendations, why we extrapolated from a review of non-direct opex and, specifically addressing the issue raised in Sunwater's response, why we did not adjust the denominator to take account of the recommended base year direct labour adjustment.

Why did we use FY23 rather than Sunwater's projections?

We used FY23 because:

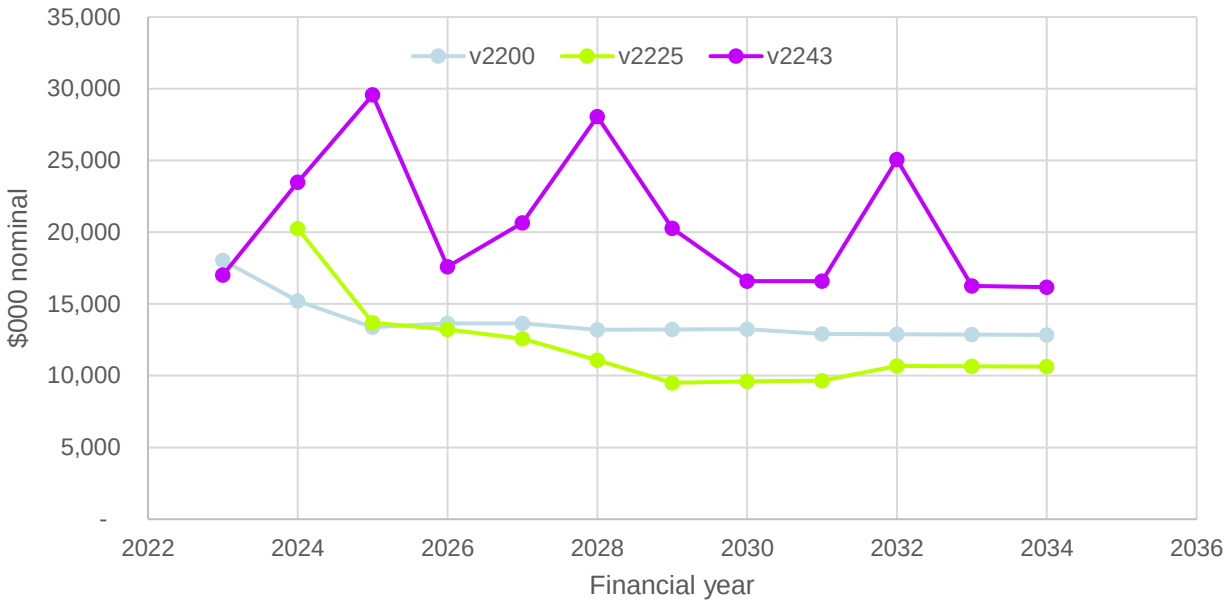
- it allowed us to base our view on actuals rather than projections in which we had limited confidence.
- the models provided to us as the basis of the projections (the Sunwater Financial Model, SFM) are greatly affected by wider assumptions including projected non-regulated activities and showed significant variability in total costs and labour recovery denominators between years and between model versions. For example the range of Corporate Overhead and Indirect costs (i.e. the costs to be recovered) between the model versions exceeds $10M p.a. in a number of years, as can be seen below.

Figure 5-7 – Total Sunwater corporate costs in different versions of the SFM



Source: Analysis of Sunwater spreadsheets 'RFI_68_QCA RFI data labour charging (2)', 'RFI8_PCM OH rates' and 'A01-Hub_2242'
Note: the y-axis has been truncated

Figure 5-8 – Total Sunwater indirect costs in different versions of the SFM



Source: Analysis of Sunwater spreadsheets 'RFI_68_QCA RFI data labour charging (2)', 'RFI8_PCM OH rates' and 'A01-Hub_2242'

- the approach taken is consistent with that applied to the other non-direct cost recommendations (opex) i.e. both approaches apply adjustments to a base year, step and escalation approach.
- we consider that significant changes in the non-direct cost uplifts affecting regulated scheme costs would require robust justification in order for us to recommend incorporating them in allowed expenditure.
- if we used the projections there would be significant year-on-year variability in the non-direct costs that is not cost-reflective from the perspective of the regulated schemes especially to the extent to which it is driven by wider factors such as non-regulated activities.

We therefore consider that the FY23 actuals provide a more solid basis for recommending labour cost uplifts than the projections which are highly variable and influenced by external factors and assumptions.

We would also note that this approach does not affect the largest non-direct cost category, corporate overheads, as this uplift is always an input to Sunwater's SFM and is consistently assumed to be 95% in all future years, which is also the uplift in FY23.

Why did we extrapolate from non-direct opex?

Our labour uplifts are based on FY23 regulated scheme opex rather than total non-direct costs or some other subset of non-direct costs. The reasons for this are as follows:

- There have been and continue to be many changes to Sunwater's business (and its assumptions about this business) outside of regulated activities. These affect total non-direct costs and the labour denominator used to allocate them.
- Sunwater's own view of non-direct costs has changed significantly over time and between SFM versions as can be seen in the figures above.

- We consider it is preferable to make adjustments on the basis of a like-for-like (i.e. regulated opex v regulated opex) comparison in order to be able to extrapolate effectively.

- Using the non-direct costs of regulated renewals as the basis of a comparison would be challenging because the level of activity and direct labour percentage of renewals changes on a year-by-year basis.

As such we consider the approach taken as a consistent and reasonable approach to deriving recommended non-direct labour uplifts for renewals.

Why did we not adjust the denominator?

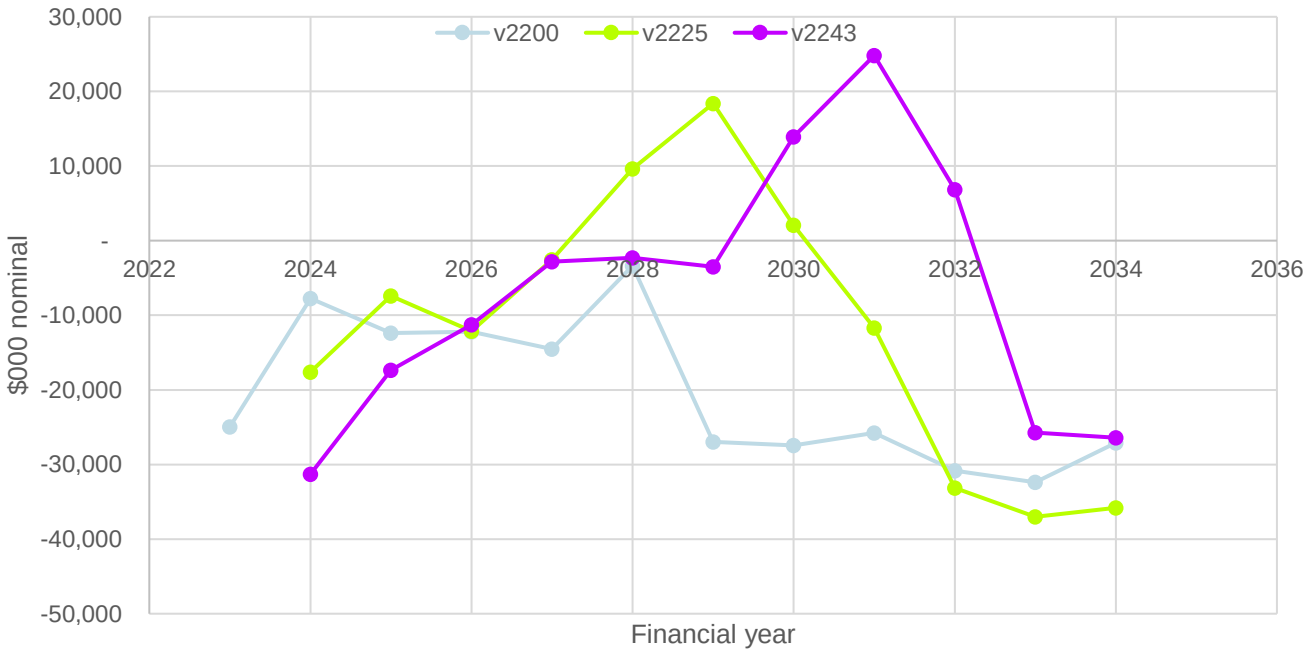
We made adjustments to reflect our non-direct opex recommendations (i.e. the numerator of a labour uplift) but did not amend the labour cost denominator to take account of our ($1.2M) recommended adjustment to base year direct labour costs or the adjustments to the direct labour proportion of renewals outlined above.

The reasons for this are as follows:

- The labour denominator and labour uplifts, especially those for indirect costs, are a point-in-time estimate and are likely to change with future activity levels including those outside of regulated schemes and activities.

- The Corporate and Local Overhead costs in FY23 and subsequent Sunwater projections are an 'applied rate' chosen by Sunwater i.e. they are inputs and are a matter of judgement. They do not change automatically with changing costs assumptions. For example in SFM v 2243 the calculated "full recovery corporate uplift rate" varies from 177% in 2024 to 71% in 2031 but a rate of 95% is applied by Sunwater in all years with under-recovery moving to over-recovery in time. It is not therefore clear what, how and when changes would apply.

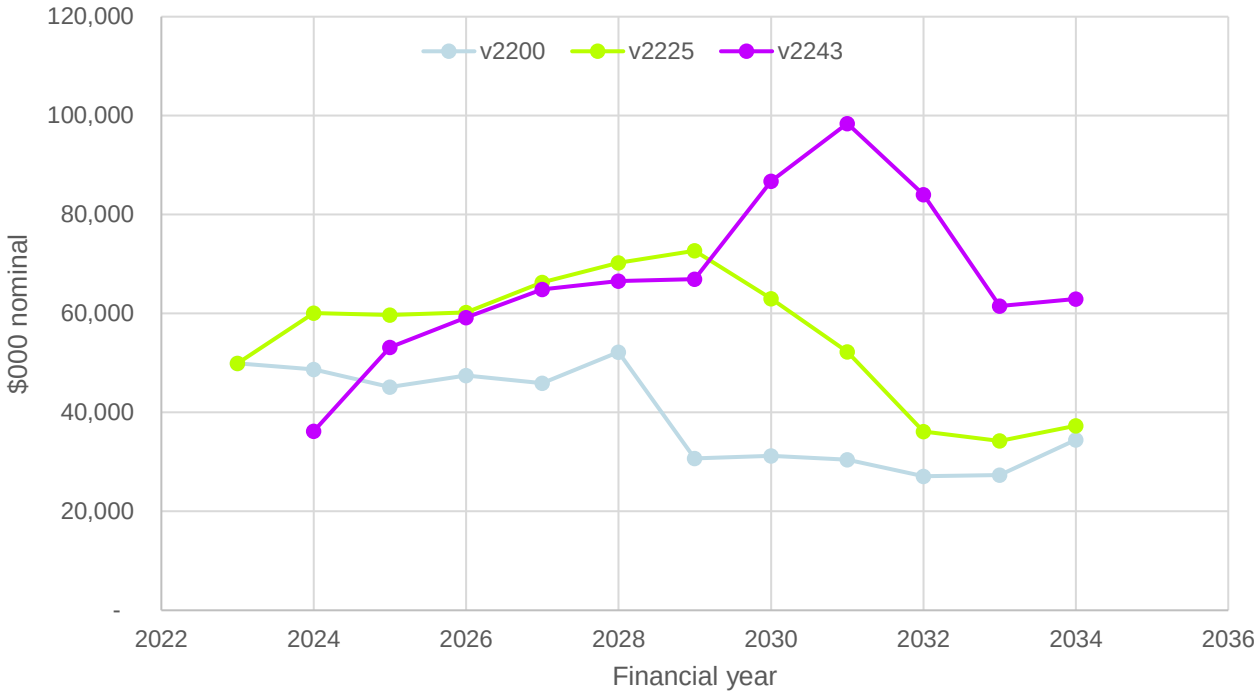
Figure 5-9 - Corporate costs over(under) recovery



Source: Analysis of Sunwater spreadsheets 'RFI_68_QCA RFI data labour charging (2)', 'RFI8_PCM OH rates' and 'A01-Hub_2242'

- The scale of the direct labour adjustment ($1.2M) is well within the typical variation for the labour denominators between SFM versions and between years within the forecast as can be seen for Corporate costs for example below.

Figure 5-10 - Corporate cost recovery through labour costs



Source: Analysis of Sunwater spreadsheets 'RFI_68_QCA RFI data labour charging (2)', 'RFI8_PCM OH rates' and 'A01-Hub_2242'
Note: the figures shown are the total corporate costs recovered from an uplift (95%) on relevant labour. The labour denominator can be established by dividing the figures shown here by 95%

- Our adjustment to base year direct labour opex reflects our view of the efficient level of expenditure not an assumption that the cost does not currently exist and will not do so in the future. It will be up to Sunwater to respond to the recommended levels of expenditure with any associated follow-on effects for any non-direct cost uplifts.

- The SFM projections, especially the most recent ones, incorporate significant increases in the labour denominator with labour cost recovery projected to increase by nearly $17M (nominal) for corporate costs from FY24 to FY25 and $6M for indirects for example[24]. This suggests a highly variable situation in which a change to the labour denominator would be a very minor part.

As set out above we consider that the approach taken to assessing non-direct costs for renewals in our report is reasonable. We do not consider that amending the labour denominator is appropriate, especially given that we have recommended a higher labour percent than was the case in FY23 and the significant variability in Sunwater's projected non-direct costs and labour denominators. We have not therefore made any changes to the recommendations made in our report.

[24] All based on v2243

5.3 Capitalisation policy

QCA Draft Report

In our report, we noted that Sunwater's capitalisation policy and guideline added barriers to capitalising expenditure. We found that, in practice, Sunwater uses a "routine" v "non-routine" distinction rather than the definitions in its capitalisation guideline to allocate between opex and renewals.

We recommended that Sunwater should revisit its capitalisation policy, noting that this would be a key step if there is to be confidence in Sunwater's proposed RAB-based approach.

In its Draft Report, the QCA found that Sunwater *"should conduct a comprehensive review of the opex and capex treatment of renewals prior to transitioning to a RAB approach, including the treatment of large irregular costs that deliver benefits to customers over multiple years."*. It also noted that an appropriate capitalisation policy would involve capitalising a significant proportion of renewals.

Sunwater response

In its response to the Draft Report, Sunwater acknowledged that its *"existing capitalisation policy is likely to expense some items that provide multiyear benefits"*.

Sunwater proposed to *"adopt a regulatory pricing capitalisation policy based on simple revisions to its existing accounting capitalisation policy that remove barriers to capitalisation while retaining current financial thresholds. This policy change would apply from 1 July 2025."*.

Sunwater provided a copy of its "Asset Capitalisation Guideline- Regulatory Pricing"[25] with its response. It also provided the spreadsheet used to assess the impact of the change in capitalisation policy[26].

Sunwater has reviewed its renewals program and presented its assessment of the impact, summarised in its response document in the table presented below:

Figure 5-11 - Sunwater assessment of impact of proposed change to capitalisation policy over price path period

	Sunwater Nov 2023 proposal	Capitalisation revision	Change
Total renewals expenditure	$146,970	$146,970	$0
Opex (step-change)	$62,186	$2,974	-$59,212
Capex	$84,784	$143,996	$59,212

Source: Table 22, Sunwater Response document (Nominal $000s)

[25] "PostRFI_2_FIN_GUIDE_01_Asset_Capitalisation_Guideline_Regulatory Pricing". Document dated August 2024.
[26] Spreadsheet "PostRFI1_Updated WMS File with New Capitalisation Policy"

Our view

Capitalisation guideline

Comparison to statutory accounting documents

Sunwater has previously provided its asset capitalisation policy and guideline documents which are used for statutory accounting[27]. We present below a comparison of the key differences between the regulatory pricing and statutory guidelines.

The first point to note is that the document provided for regulatory pricing is a guideline and not a policy. However, the document does include a note that it *"should be read in conjunction with Sunwater's overall capitalisation policy, noting that this document takes precedence in respect to the treatment of costs in a regulated pricing context."*

The regulatory pricing guideline has many similarities to the statutory guideline including asset management hierarchy and capitalisation thresholds. Key differences include:

- A shift to greater capitalisation. A number of costs are capitalised under the regulatory guidelines which are expensed under the statutory approach. These include:
    - Major overhaul or inspection.
    - Restoration, refurbishment or replacement of an asset to original acceptable functional condition.
    - Meters - replacements that are like for like.
- We also note that the regulatory guideline appears to allow earlier capitalisation of costs, starting from the pre-acquisition stage rather than post-definition.
- The regulatory guideline adopts a simple four box decision tree compared to the eleven box tree used in the statutory document.
- The regulatory guideline also has a section on the treatment of Software as a Service (SaaS) costs which is not addressed in the statutory document. We consider this in a separate subsection below.

These differences are set out in the following tables and text.

Table 5-5 – Differences between the statutory and regulatory guidelines

Area	Statutory guideline	Regulatory guideline	Comment
Recognition of assets	a) It is probable that future economic benefits associated with the item will flow to the entity; and b) The cost of the item can be measured reliably.	As statutory + c) Item is intended for use over a period greater than 12 months, d) Item is not consumed or sold in the short term or as part of normal business operations	Not likely to have a significant effect

[27] RFI4 and RFI10B Asset Capitalisation Guideline, Sunwater, July 2019 and "Asset Capitalisation Policy", November 2023

Area	Statutory guideline	Regulatory guideline	Comment
Subsequent Costs	Costs incurred in relation to an asset after the initial acquisition can be capitalised provided there is an **enhancement expected to increase the functionality** of the asset **in excess of the previously assessed standard** of performance. If it is probable there will be no enhancement of economic benefits, the additional costs must be expensed…	…can be capitalised: a) if there is an enhancement expected to increase the functionality of the asset resulting in enhanced economic benefits. If no enhancement of economic benefits is expected, the additional costs must be expensed. b) if the cost is related to a **planned major overhaul or inspection of an asset**. In which case previously capitalised expenses of this nature should be de-recognised and the cost of the latest inspection capitalised…	The regulatory guideline allows capitalisation of "planned major overhauls or inspection"
Customer Funded Assets	Customer funds the installation of a new meter: [..] • Costs associated with the purchase or design of the meter is expensed… • The asset is capitalised at a nominal value of $1. Customer contributions and construction over more than one year: [..] • All costs are capitalised	• Costs associated with the purchase or design of meters are expensed if they are below capitalisation thresholds or if Sunwater does not control the meter The asset is capitalised at cost if the value is above the capitalisation threshold and Sunwater determines it has control of the meter.	Appears to provide greater scope for capitalisation of meters funded by customers (based on control and threshold rather than contributions/construction over more than one year)

Area	Statutory guideline	Regulatory guideline	Comment
Capitalisation through the capital investment lifecycle	Business development works up to the point of Definition should be treated as an operating expense. For the cost to be treated as capital, the project should have reached the following criteria…The project is clearly defined and separately identifiable… commercially and technically viable with the development of a business case….resources are available to complete the project [costs of evaluation and definition are expensed]	Preliminary stage: All costs expensed as incurred, except for payments to obtain an option to acquire an asset. Pre-acquisition stage: …costs should be **capitalised where they are incremental** – i.e. costs would not have been incurred if the asset was not being acquired or constructed…. During this stage general and administrative cost and overhead costs are not considered to be directly attributable and should be expensed as incurred. Acquisition-or construction stage: …should be capitalised if they are directly attributable to the asset …General and administrative, and overhead costs are generally not considered to be directly attributable and therefore should be expensed as incurred. Exceptions include where it can be demonstrated that costs incurred are incremental and directly attributable to a specific project.	The regulatory guideline appears to allow earlier capitalisation of costs, starting from the pre-acquisition stage rather than post-definition It is not clear why: • overhead costs are expensed at pre-acquisition stage when incremental direct costs can be capitalised and • only incremental overhead costs are capitalised at acquisition/construction phase It is also not clear that this is consistent with how Sunwater has treated these costs in its assessment of the impacts of using its regulatory approach
Capital vs Operating Expense	Where the expenditure is above the capitalisation threshold and is used to procure a new asset, upgrade or enhance the functionality or extend the life of the asset the expenditure will be capital expenditure.	Where the expenditure is above the capitalisation threshold and is used to procure a new asset, upgrade or enhance the functionality or extend the life of the asset or **that forms part of a major overhaul or inspection** identified within an asset management lifecycle for that asset… then that expenditure may be capital expenditure. … Note: If an asset requires replacement due to failure, then the existing asset should be de-recognised and the new replacement asset capitalised.	The regulatory guideline allows capitalisation of a major overhaul or inspection and of replacement due to failure

Area	Statutory guideline	Regulatory guideline	Comment
Major inspections	Not addressed	See below	
Operating expenditure	…expenditure ..to ensure an asset continues to operate at normal capacity until the end of its life, it is regarded as an operating expense. a) the expenditure in replacing components of a larger asset is less than the capitalisation threshold of that asset class it is considered to be operating expenditure b) the expenditure maintains the condition of an asset and which does not increase the useful life or functionality will be classified as operating expenditure	..expenditure … to ensure an asset continues to operate at normal capacity until the end of its life, it is regarded as an operating expense. Expenditure that maintains the condition of an asset and does not increase the useful life or functionality of the asset will be classified as operating expenditure.	No significant difference. Whilst the regulatory guideline does not refer to the capitalisation threshold it is referred to elsewhere.

Asset Capitalisation Guideline- Regulatory Pricing and RFI4 and RFI10B Asset Capitalisation Guideline, Sunwater, July 2019

The statutory guidelines do not explicitly address the treatment of major inspections. However, the regulatory guidelines say:

> *Carried out as part of an asset management lifecycle and meeting the recognition criteria, [overhauls including replacement of parts and major repairs and maintenance] may qualify for recognition as an asset.*
>
> *AASB 116.11 and AASB 116.14 provide that where major inspections are performed as a condition to operate the asset, regardless of whether repairs are made, the cost of the inspection may be recognised as part of the carrying amount of the asset.*

The regulatory guidelines present a basic four box decision tree which is based on four criteria (control, future economic benefits, use for more than 12 months and greater than the threshold) and does not include additional questions such as whether "the *'total value of the expenditure' [is] greater than 75% of Replacement Cost (Book3) of the Asset Facility"*.

Both documents provide examples of pricing treatment as follows.

Table 5-6 - Regulatory pricing treatment examples provided in the regulatory guideline

Description	Example	Treatment in statutory guideline	Treatment in regulatory guideline
General maintenance, Aesthetic improvements	Slashing / Mowing / Painting	Expense	Expense
Annual ongoing maintenance	Replacing spares and periodic servicing	Expense	Expense

Restoration, refurbishment or replacement of an assets to original acceptable functional condition	Repairs following a flood event	Expense	Capital (the residual value of the old asset is disposed, and the new value is capitalised on the RAB)
Meters - Replacements that are like for like	Functional	Expense	
Meters - New installations	Brand new	Capital	All three: capital
Meters – Replacing with an upgraded meter	Upgrade to electronic / Increase size	Capital	
All expenditure on new infrastructure above the capitalisation threshold that will provide future economic benefits and that is directly attributable to the acquisition of construction cost of the asset.	New pipeline, stairs and handrails, new pump	Capital	Capital

Table on page 10, Asset Capitalisation Guideline- Regulatory Pricing and RFI4 and RFI10B Asset Capitalisation Guideline, Sunwater, July 2019

We note that, unlike the statutory guideline, the regulatory document does not include a section on reporting.

SaaS

For SaaS the regulatory guideline says that "there are accounting guidelines" and says

> • *The purchase of a cloud-based software where there is a contractual right to take possession of the software at any time of the hosting period and it is feasible to run the software on Sunwater's own hardware is treated as an intangible asset.*
>
> • *Purchase of a cloud-based software under a hosting arrangement where there are no contractual or legal right to the specific asset and the rights are to access the supplier's application are treated as an operating expense.*
>
> • *Configuration and customisation of the SaaS product which involves setting of various flags or switches, defining parameters within the application software's existing code to function in a specified way is treated as an operating expense.*
>
> • *Modifications and configuration to current IT systems to enable the use of SaaS is treated as capital.*

However, it does not make a definitive statement about the application of these guidelines and goes on to say that *"for pricing purposes Sunwater will treat SaaS as a capital item".*

We note that the logic behind this statement is not set out and it is not clear which costs the guideline is saying will be treated as capital items. For example whether configuration and customisation costs and the costs of access to cloud-based suppliers' applications are to be capitalised.

The treatment of these costs is not explicitly addressed in the statutory guidelines.

Conclusions

We consider that the new guideline is more suitable for use in a RAB based approach than the previous use of % of replacement cost as key criteria for expensing or capitalisation of renewals expenditure.

However, we consider that the document would benefit from greater clarify in a number of areas including:

- The treatment of SaaS costs: it is not clear if the regulatory guideline is suggesting that *all* SaaS costs should be treated as capex (which would seem unlikely and inappropriate) and, if not, which costs should be. It would also be useful to outline the underlying logic if it differs from the guidelines set out.

- The treatment of inspection and overhaul costs:

    - it is not clear how users of the guidance should decide when and whether inspection and overhaul costs should be capitalised. It would be useful to provide more detailed logic and proposed definitions for this decision. In particular it would be useful to outline when an overhaul would fall into the category of capex as opposed to expenditure which "does not increase the useful life or functionality". Otherwise users of the guidelines are likely to classify the same activities differently from each other.

    - the document refers to "replacement of parts and major repairs and maintenance" potentially qualifying as capex if they are carried out as part of an asset management lifecycle. It would be useful to clarify when and if the intention is to treat assets whose parts are replaced as "complex assets" with the component parts which are replaced identified and depreciated separately[28].

- It is not clear to us why it appears that there is a difference in the proposed cost treatment of pre-acquisition stage costs in the regulatory guideline (compared to the statutory guideline) and why:

    - overhead costs are expensed at pre-acquisition stage when incremental direct costs can be capitalised and

    - only incremental overhead costs are capitalised at acquisition/construction phase

    In particular it is not clear that this is consistent with how Sunwater has treated these costs in it's assessment of the impacts of using its regulatory approach discussed below.

- The guideline does not create a framework for capture, review, management and reporting of the parallel regulated fixed asset register. It would be useful to set out a process (potentially similar to that set out in Section 13, titled "Reporting", of the statutory document) to ensure this is carried out and reconciled where necessary.

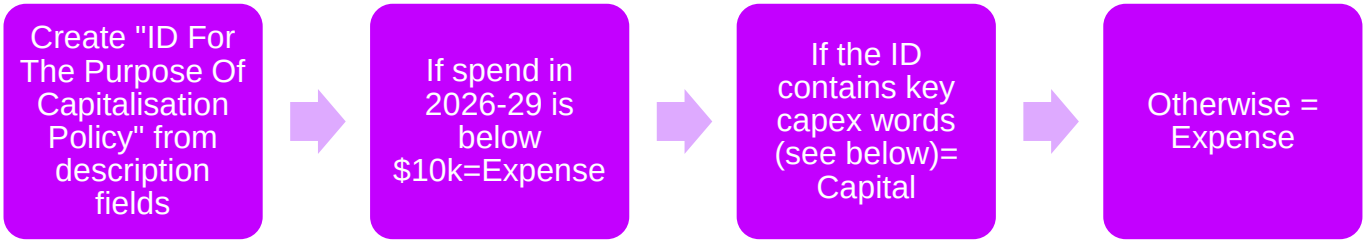
Impact of the change

Sunwater has estimated the impact of the change in its capitalisation policy for regulated prices. It has done this by applying a keyword search and capitalisation threshold test to the "WMS" spreadsheet which contains renewals activities which it has classified as "non-routine".

[28] See for example the AASB Interpretation document "Depreciation of Long-Lived Physical Assets: Condition Based Depreciation and Related Methods" 2014 Compiled UIG Interpretation 1030 (Dec 2013) or the Queensland Treasury "Non-Current Asset Policies for the Queensland Public Sector" NCAPs-1-to-7-Combined.pdf acknowledging that the latter does not necessarily apply to Sunwater.

Our understanding of the logic used in assessing the impact of the change in policy is summarised below.

Figure 5-12 - Our understanding of the process used to evaluate the impact of the new policy



Source: AtkinsRéalis review of Sunwater spreadsheet 'PostRFI1_Updated WMS File with New Capitalisation Policy'

**Key capex words used are: "Program, purchase, Install, upgrade, rfrb, refurbish, refurb, new, NDT[29], replace"*

We note that the Project IDs used for the keyword searches are not available from business-as-usual processes but have themselves been produced by Sunwater's consultants using a process of bundling into projects, translation of elements into plain English and application of a naming convention[30].

There is also a list of key words for expensing of expenditure. However, given the way the spreadsheet operates we understand that these are not a trigger for categorisation in practice[31] and only lead to a distinction between 'expense' and 'other' costs. Some other observations:

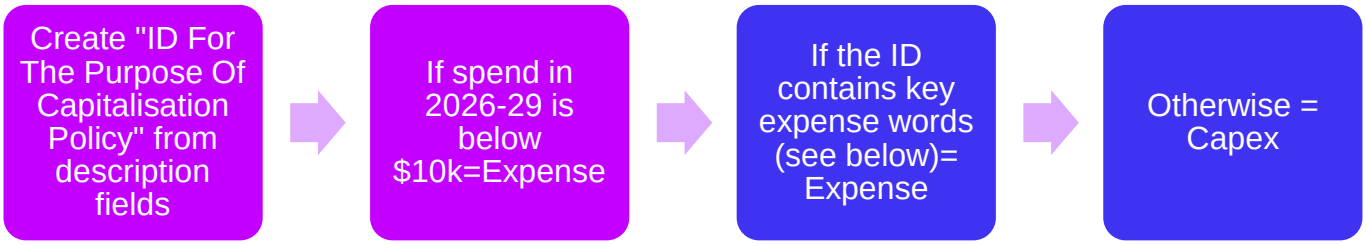
- Nearly all renewal activity descriptions (representing 99% of expenditure between 2025 and 2029) have capex keywords in them.
- Approximately 17% of renewals expenditure descriptions have expense keywords[32] in them. Nearly all of this expenditure has both capex and expense keywords attached.
- Approximately 1% of expenditure on renewals activities is below the capitalisation threshold.

By applying the capex keywords first in the process the proportion of renewals expenditure being expensed according to Sunwater's estimate averages c2% compared to the 17% which have expense keywords.

As a sensitivity test we have assessed the impact of using the expense key words first i.e.:

[29] Non-destructive testing which Sunwater explains in RFI4 has been included on the basis that the periodic nature of the testing (i.e. occurs at 10 yearly for Coolmunda spillway) provides economic benefit that lasts across the intervening periods.
[30] As summarised in Section 9 of the RXI92 "Development of forecast renewal expenditure", KBR, November 2023
[31] as they are in the step following the capex words test, after which expenditure is divided into either 'expense' or 'other' which has zero expenditure over the period between 2025 and 2029.
[32] Key expense words used by Sunwater are: "maintenance, minor works, repair, Study, options, decommission, design, inspection, Investigate, valuation, clean, inspect, test, condition, review, survey, gate 0, procure, retired

Figure 5-13 – Alternative approach used to test sensitivity test of the change in policy



The results of doing the assessment in this order is that the % of expenditure which is expensed increases to c16%.

Table 5-7 - Cost treatment of renewals if expense keywords are used as the primary approach

	2026	2027	2028	2029	*Total*
Capital	31,260	35,212	33,748	22,604	*122,824*
Expense	5,216	7,708	6,609	4,612	*24,145*
Total	36,476	42,920	40,357	27,217	*146,970*
% expensed	***14%***	***18%***	***16%***	***17%***	***16%***

Analysis of Sunwater spreadsheet 'PostRFI1_Updated WMS File with New Capitalisation Policy'

Whilst this gives an indication of the sensitivity of the approach, we recognise that there is uncertainty inherent in applying this method in advance to over 7,000 expenditure lines (i.e. for the 2025 to 2029 period). From a very brief reading of some of the 363 unique activities above the capitalisation threshold and which have both capex and expense keywords, it does not appear unreasonable to us that they be treated as capex rather than expensed.

However, it is clear that there are some significant limitations to the assessment of the impact of the change:

- it is only being applied to activities already classified by Sunwater as 'non-routine'.
- the link between the change in capitalisation guideline and the keywords used is not clear. For example NDT is not explicitly referenced in the guideline and it is not clear if all uses of the word "new" or "program" should be capitalised for example.
- use of a keyword search on a field generated created as a one-off activity for the assessment of renewals means it will be hard to reproduce, assess consistently over time or embed.
- without clear data menus or instructions to those who generate the renewals activity descriptions it is not clear that the fields being searched using keywords will be appropriate or consistent across schemes, activities or time.

As such we consider the assessment to be a coarse first attempt at quantifying the impact rather than something which could be relied on as the basis of ex-ante assessments of opex and capex allowances.

We consider that further work will be required to refine the approach, considering details such as how studies should be accounted for. We also consider that Sunwater will need to embed and mature the assessment as set out in 'recommendations' below. It is likely that this will take time to mature. In the meanwhile, and in preparation for future pricing proposals, we consider it would be useful for Sunwater to put in place shadow accounting using its new capitalisation policy. This will help to establish a much more solid base to inform future reviews as well as teasing out some of the finer details of the practical implementation of the change.

In summary therefore we consider the assessment to be a reasonably coarse first attempt at quantifying the impact of the change in capitalisation approach. However, it has significant limitations and will take time to embed the allocation to capex and opex. The approach will benefit from being applied in practice along the lines of the recommendations set out below and a shadow reporting process being put in place.

Recommendations

Our recommendations for transitioning to the new capitalisation policy for regulatory purposes and improving the assessment of the change can be summarised as follows:

1. Clarify and amend the guideline in the topic areas set out in the 'capitalisation guideline' section above.

2. Put in place a process by which activities and costs can be systematically classified using these definitions as part of a business-as-usual process (presumably as part of the WBS), informing those who routinely code activities on how to apply the definitions and select the appropriate codes.

3. Develop a system of regular reporting of 'shadow' regulatory accounts:

    a. Develop and maintain a parallel fixed asset register for regulatory purposes (as already envisaged in Section 8.1 of the guideline)

    b. Maintain a record of the associated opex adjustments where necessary (i.e. to reflect costs which are capitalised rather than expensed under the new policy).

4. Review and verify that the variances from the statutory accounts are understood and can be explained by the changes made in the opex v capex definitions.

5. Refine and improve the guideline and process above based on the experience of implementing the change and any challenges in being able to explain the variances from the statutory accounts.

6. Make these shadow accounts available for regulatory purposes.

5.4 Asset lives

QCA Draft Report

In our report we said that *"we have very limited confidence in the asset life data provided and used in the WMS to derive the weighted average asset life that Sunwater is proposing in the RAB model. We recommend that Sunwater develops an integrated data set which brings together proposed renewals and asset lives in a consistent manner. This will be especially important if a RAB-based approach is adopted."*

The QCA draft report noted … "*that the proposed asset life of 5 years appears high compared to the weighted average life of assets expected to be capitalised in the next 12 years*".

Sunwater response

Sunwater has provided an updated version of WMS data by capex/opex classification and asset lives for its renewals programme which we have used for our analysis on the robustness of the asset lives.

Our view

As noted in our report there are a number of sources of asset life information and there are sometimes discrepancies between these. Sources of asset life information include:

- WMS assigned lives: asset lives which have been assigned to the functional location code of project activity within the WMS data. For assets where this is not available the asset life within the functional location code itself is used.
- Inference from renewal cycles: the asset life can also be inferred from proposed renewal expenditure cycles
- Actual asset life from installation dates collated as part of asset surveys / condition assessments.
- Asset life update: Sunwater has provided asset lives in its response to QCA's draft report as discussed below.

The differences between these sources is one of the factors leading to concern about the suitability of asset life data for determining depreciation under a RAB-based approach at this point in time.

These inconsistencies may be due to a number of reasons. The most likely are:

- Data being entered without structured guidance to ensure consistency between users/planners.
- Insufficient quality assurance or centralised ownership of the assumptions.
- Multiple views of asset lives (e.g. assets assigned to the life of its parent asset or different views of which asset class to map activity to). Projects can be assigned to multiple sub-assets or the parent asset and therefore the asset life could be incorrectly set to the parent asset life and not to the asset class of the renewal activity being carried out.

We have reviewed the updated asset information provided by Sunwater in the updated version of the WMS data. Sunwater sets asset lives at the program level for the Arc Flash, Instrumentation, and Dam Safety Management programs. These are set uniformly across the irrigation schemes and are 36, 15 and 20 years respectively.

- For the Arch Flash program, the figure is consistent with that typically given to switchboards in the WMS. We do note that the figure is higher than our experience of switchboards which we have seen being assigned asset lives of 20-30 years. This suggests that it may be worth Sunwater considering if a shorter asset life may be appropriate, ideally using an empirical basis (i.e. reviewing actual effective lives of its own or comparator assets).
- For Instrumentation we consider 15 years is reasonable with values typically used in the industry of 10 to 15 years for control system assets.
- For Dam Safety Management plans it is difficult to take a view of what weighted average asset life to use as this will be dependent on the requirements which will depend on the risk associated with each dam, however given the lower value of these project lines in comparison to other assets or renewal programs 20 years is considered to be reasonable.

Asset lives are held at functional locations and therefore can differ between locations for the same asset type. Within the asset data there are some significant variations between the same asset type at different locations. We consider that asset lives for the same asset type should only differ between locations if there is robust logic for the difference and a system should be in place that ensures quality assurance and control of the asset life data.

Examples of variations in asset lives for the same asset type are shown in the below table. We have also reviewed the asset lives quoted in the capitalisation guideline for regulatory pricing. We note that the asset classes within the list of assets for renewal in the WMS data do not map clearly to those in the capitalisation guideline. Where an asset class in the WMS data does not directly map to the capitalisation policy asset classes we have shown what we consider to be the most similar asset class(es).

We note, however, that almost all renewal activity could be captured under the capitalisation guideline asset classes of "machinery and equipment" and "other plant and equipment" with a maximum range of 10 to 12.5 years for asset lives. This suggests that the guideline would benefit from greater clarification and definition of how the capitalisation asset classes map onto those asset classes used within the WMS data.

Table 5-8 – Examples of variations in asset lives for same asset type

Asset type	Asset lives	Capitalisation guideline
Refurbish access roads	14,16 and 100 years	No asset class for this type of activity
Refurbish building	9, 17, 18 and 20 years	"Buildings" are 60 years and will be for the structure "Office furniture and equipment" are 10 years and is reasonable if refurbishment is non-structural
Refurbish fencing	1, 5, 6 and 10 years	No asset class for this type of activity
Refurbish screen	5, 6, 30, 100 years	"Pump stations" are 80 years and only appropriate for civils "Other plant and equipment" are 12.5 years however is considered low for the screen itself.
Replace cable	31, 35, 40, 45 and 100 years	"Machinery and equipment" = 10 years and "Other plant and equipment" = 12.5 years, both much lower than WMS asset life
Replace control systems/equipment	5, 15, 18 and 20 years	"Machinery and equipment" = 10 years and "Other plant and equipment" = 12.5 years, slightly low depending on the activity
Replace electric motor	10, 15 and 60 years	"Machinery and equipment" = 10 years and "Other plant and equipment" = 12.5 years
Studies	3, 5, 10, 18, 25, 30, 35, 40, 45 and 100 years	Studies are not included as an asset class in the policy

Analysis of Sunwater spreadsheet 'PostRFI1_Updated WMS File with New Capitalisation Policy', 'PostRFI_2_FIN_GUIDE_01_Asset_Capitalisation_Guideline_Regulatory Pricing' and 'RFI_50 – Renewals Expenditure'

In many cases where asset lives in the WMS are extremely different to what would be expected, it appears that the asset life has been set to that of the asset site level or parent asset, for example a study for a dam site with 100 years asset life (this could be reasonable if the study is being capitalised with the same asset life as the underlying asset, however other studies for dam assets have 5 years for asset lives), or power and lighting at a dam site with 100 years instead of being 17 years like other power and lighting assets within the WMS.

For the asset lives which are not held at program level the top 10 lines by value were reviewed and are shown in the following table

Table 5-9 – Asset lives for top 10 assets by proposed expenditure in 2025 to 2029

Description	Asset Life	Comment
Replace control gear at Quart Pot Creek Pump Station	15 years	Does not appear unreasonable
Replace communication control system at Don Beattie Pump Station	15 years	Does not appear unreasonable
Replace control system at Gooburrum	20 years	Is not necessarily unreasonable but note that it is higher than the control systems above
Replace wall sheet piling	100 years	This appears high to us for sheet piling.
Study low voltage switchboard Mirani Pump Station 3	35 years	On high side even if study being capitalised to same asset life as the underlying asset but appears inconsistent with other studies given an asset life of five years
Replace shutters at Ben Anderson Barrage (Years 4 and 5)	100 years	This appears high to us for shutters.
Study Comprehensive Risk Assessment & ALARP at KRM	100 years	Does not appear unreasonable if study is being capitalised to the same asset life as the underlying asset, but appears inconsistent with other studies given an asset life of five years
Refurbish Liner Concrete at Clare	1 year	Very low, would expect at minimum 10 years
Refurbish Liner Concrete at Millaroo	1 year	Very low, would expect at minimum 10 years

Source: Sunwater spreadsheet 'PostRFI1_Updated WMS File with New Capitalisation Policy' and 'RFI_50 – Renewals Expenditure'

If Sunwater intends to move to a RAB based approach we consider it would be useful to undertake a detailed review of the asset life data including validating and correcting them where required, prioritising asset types with larger values. Asset lives should only vary between locations for the same asset type where there is a robust reason to do so, using different asset lives for same assets at different locations requires a higher degree of data validation and control than assigning an asset life across a whole asset type.

Currently the inconsistency of asset life data not just across different sources but also within the same data source means that the asset data is not robust enough to move to a RAB approach now as it requires accurate and robust asset lives.

Recommendations

Building on our recommendations in section 5.3 above for transitioning to the new capitalisation policy for regulatory purposes we consider that Sunwater should also undertake the following to improve accuracy and robustness of asset life data:

1. Produce clearer asset life definition and guidance to ensure consistency of approach.

2. Empirical analysis: actual asset replacement (and age) data analysis and use of asset data (reactive work orders) and performance analysis/condition assessments to improve understanding of empirical asset lives.

3. Provide training to staff that will be managing asset life data and undertaking condition assessments and other activities for determining evidence based asset lives.

4. Reconcile and consolidate all asset life information based on empirical evidence and collate into an integrated and centralised single source for both existing assets and for additions.

5. Embed this asset life data within the WMS.

6. Align the asset classes in the capitalisation policy with those in the single source of asset life data.

5.5 Opportunities for improvement

QCA Draft Report

QCA in its Draft Report notes that there is significant room for efficiencies from improvements to asset planning and management and states that Sunwater should implement the following actions within this price path period:

Box 3: Draft findings on Sunwater's asset planning and management

We consider Sunwater should implement the following actions this price path period:

- Efficiency plan:
  - Develop an efficiency plan that sets out a pathway to revealing efficient costs including an ongoing process to identify and implement spend to save investment initiatives and efficient working practice changes.
- Asset condition and risk understanding:
  - Develop an asset health reporting system to optimise maintenance and renewals activities. This system can be used to communicate asset health trends and underlying risks to senior management and stakeholders.
  - Improve understanding of the condition and associated risks of assets by undertaking more routine asset condition assessments and integrating these assessments into the asset health reporting system.
- Evidence-based asset lives:
  - Develop evidence-based asset lives to strengthen confidence in asset longevity.
  - Create specific asset plans, based on performance and condition, informed by historical renewals.
- Cost estimation and control:
  - Develop strong cost estimation tools and methods with a feedback mechanism to monitor performance of cost estimates, and find ways to improve them.
  - Conduct active and ongoing re-prioritisation of renewals works at a portfolio level to maximise the benefits within the available budget.
  - Develop an integrated dataset which brings together proposed renewals and asset lives in a consistent manner.

Source: Box 3, Rural irrigation price review 2025-29: Sunwater - Draft Report

Sunwater response

In its response Sunwater summarises the QCA's recommended improvements in asset management and capital planning and makes two points. The first is that it asserts that the recommended improvements *"contain no recognition or acknowledgement that the changes it is seeking will require additional effort (and cost) to deliver",* it also asserts that *"QCA's thinking appears designed for a business that does not run 26 discrete service contracts where trade-offs across schemes and customer groups are generally not possible"*.

On the wider issue of efficiencies from improvements to asset planning and management Sunwater has provided its Asset Portfolio Uplift Program (APUP) delivery plan which is a high priority and is being governed via an executive sponsored portfolio and notes its commitment to continuing its maturity journey and has already commenced several initiatives designed to uplift Sunwater's asset management and capital planning capabilities. In addition Sunwater has provided a summary of a range of other initiatives being delivered to uplift its asset management and planning maturity.

Our view

Our view on Sunwater's statement that the recommended improvements *"contain no recognition or acknowledgement that the changes it is seeking will require additional effort (and cost) to deliver"* is provided earlier in this report in section 2.1.3.

We have reviewed Sunwater's APUP delivery plan and post draft RFI 6 response. The APUP delivery plan is across two periods, one from May to December 2024 (tranche 0 – defining the program), and the second from January to June 2025 (tranche 1 – build foundations). We have mapped out the APUP initiatives and actions to the Box 3 actions listed by QCA in the below table as well as other initiatives summarised by Sunwater. We have included a number of tasks that will help close the gap between QCA's list of actions and those completed or planned for by Sunwater in addition to those already provided in section 5.4:

Table 5-10 – Comparison of Sunwater's APUP delivery plan and other asset management initiatives to QCA's requested actions

QCA Box 3	APUP delivery plan	Other initiatives	Comment and recommendation
Efficiency plan *Develop an efficiency plan that sets out a pathway to revealing efficient costs including an ongoing process to identify and implement spend to save investment initiatives and efficient working practice changes*	June 2025: • Sunwater plans new Project Scope Definition resources to develop future stream of work • Sunwater will update Strategic Asset Management Plan		The proposed activities do not appear to address the requirement for an efficiency plan Recommendation: -Develop an efficiency plan which clearly sets out the actions Sunwater will take to improve its efficiency.
Asset condition and risk understanding Develop *an asset health reporting system to optimise maintenance and renewals activities. This system can be used to communicate asset health trends and underlying risk to senior management and stakeholders* *Improve understanding of the condition and associated risks of assets by undertaking more routine asset condition assessments and integrating these assessments into the health reporting system*	December 2024: • Develop Asset Lifecycle Process Maps to level 2 • Develop Risk based prioritization tool and linkages to ER and Project Risk frameworks • Develop PCM P3MF with common tools and processes for delivery of projects across the regions June 2025: • Update Asset Management System • Develop draft Asset Risk Management framework • Uplift in Asset Condition Assessments	SAP Asset Performance Management (APM) concept started in Sept 2024 and complete by April 2025. If successful implementation commences in 2026 and up to three years duration. Since early 2024 Asset Health Dashboard for PCM Plan for 2026 to 2075. Plan to extend dashboard to include risk assessment scores as part of SAP APM implementation.	Some of the planned activities appear consistent with the QCA's recommendations, especially as concerns more routine condition assessments, but it is not clear whether they fully meet them in respect of asset health. Recommendation: -Ensure that that asset health reporting informs optimisation of renewals as well as maintenance activities (noting that the Aset Health Dashboard refers to PCM, not renewals).
Evidence-based asset lives *Develop evidence-based asset live to strengthen confidence in asset longevity* *Create specific asset plans, based on performance and condition, informed by historical renewals*	December 2024: • Develop Asset Lifecycle Process Maps to level 2 • Develop a methodology for Asset Portfolio categorisation and prioritization for the FY26 definition cycle	Completed Sept 2024. Review and update of maintenance item asset lives for different object types. 109 of 292 object type asset lives updated.	The proposed activities are likely to help with the creation of specific asset plans but do not explicitly address the recommendation to create evidence-based asset lives. Recommendation:

	June 2025: • Update Asset Management System • Develop draft Asset Risk Management framework • Uplift in Asset Condition Assessments		- Develop evidence-based asset lives to strengthen confidence in asset longevity. This is likely to include analysis of asset age, maintenance, performance and condition data to improve understanding of actual (i.e. empirical) asset lives.
Cost estimation and control *Develop strong cost estimation tools and methods with a feedback mechanism to monitor performance of cost estimates, and find ways to improve them.* *Conduct active and ongoing re-prioritisation of renewals works at a portfolio level to maximise the benefits within the available budget* *Develop an integrated dataset which brings together proposed renewals and asset lives in a consistent manner.*	June 2025: • Provide centralized portfolio support services including forecasting and cashflow analysis. • Establish formalized governance for improved regional management of PCM Program	Currently reviewing and cleansing the price bases for maintenance estimated cost data within SAP, followed by update to process for extracting costs with uplifts	The proposed activities do not appear to address the recommended action concerning cost estimation and feedback mechanisms. Recommendation: -Develop cost estimation tools and methods with a feedback mechanism which allows it to continually improve. This will involve monitoring the performance of cost estimation (i.e. comparing outturn costs with prior estimates) and identification of ways in which estimation can be improved - Continual reprioritisation of works at a portfolio level. This is likely to build on the PCM governance mentioned in the APUP but will need to bring together asset management, expenditure and benefits data to enable structured prioritisation.

Source: Box 3, "Rural irrigation price review 2025-29: Sunwater - Draft Report", and post Draft Report RFIs 5 and 6

Based on the limited information available to us it appears that Sunwater's APUP delivery plan and other initiatives will contribute to meeting some of QCA's recommended actions. Sunwater forecasts progress against the QCA recommended actions by June 2025, when it expects to have largely completed the foundations for improved asset planning and management. However, it is not clear to us that the planned activities shared with us cover all of the QCA recommendations in particular those related to an efficiency plan, asset health, evidence-based asset levels and cost estimation.

In respect of Sunwater's point about QCA's recommendations not being designed for a business with 26 discrete service contracts, we find this statement hard to agree with. The recommendations set out by QCA appear to be fundamental foundations for good management of a business whether it operates 200 schemes or one. We also consider that the recommended improvements should be achievable across asset classes and scheme types and are agnostic to the number of schemes.

5.6 Submissions from other stakeholders

5.6.1 Double work on some assets

Stakeholder submission

A stakeholder has raised the issue "*around programming of works or feedback on the programs to ensure that work on the one asset was not done twice at different times for different reasons*", this was raised specifically in regards to the safety work on the Kinchant Dam switchboard followed by the replacement of it 2 years later.

Our view

We have reviewed the Arc Flash Program business case and confirm that Sunwater has adopted a risk based approach ensuring that electrical risk is reduced to As Low As Reasonably Practical (ALARP). The investment has undergone suitable optioneering and Sunwater has identified an option where it installs protections and manages residual risk through operations with the identification of necessary replacements to achieve full compliance at a later date as the most prudent and efficient option. This option, and therefore the Arc Flash Program, does not include works to replace switchboard assets that, following the successful implementation of the program, remain above the risk category of CAT2. Switchboard replacement works are part of the Switchboard Renewal Program. We therefore consider that Sunwater's approach does not result in double work.

5.6.2 Metering upgrades

Stakeholder submission

A stakeholder has queried why Sunwater is allowed to justify upgrading to more costly electromagnetic meters when the current Queensland interim water meter standard for non-urban metering says that any meter larger than 600mm does not require a "*pattern approved*" meter. The stakeholder also suggests that meters that have not "*failed or became faulty*" are also being replaced even though they meet the standards.

Our view

We have reviewed Sunwater's business case for meter renewal program, the business case sets out a clear list of actions by priority order for the replacement of meters when these have been identified as failed or nearing failure:

i. Meter is repaired using OEM parts

ii. Meter is repaired using remanufactured replacement components

iii. Meter is replaced 'like-for-like' with existing serviceable stock without altering the offtake arrangement

iv. Meter is replaced with a modern equivalent.

Sunwater's business case also makes it clear that Sunwater considers its customer meter assets as a run to failure asset, this means that they are only replaced when and if Sunwater is unable to service or repair the asset. Sunwater uses a planned maintenance program to maintain the customer meters for as long as possible. Where Sunwater is unable to replace a mechanical meter with a like for like replacement (obsolescence or lack of manufacture support) they are replaced with modern equivalent technology which will be electromagnetic meters. This is reflected in the average age of Sunwater's installed meters which at over 25 years is longer than the standard asset life for meters which is 20 years.

Meters for connections great than 600mm diameter also follow this approach, so if the meter can be replaced with like for like then it will, but as noted above where this is not possible a modern equivalent technology is installed.

We have reviewed the Queensland Interim Water Meter Standard for Non-Urban Metering and note that from Table 2 of the standard that it is clear that any new meters for diameters greater than 600mm must be electromagnetic or ultrasonic.

Should the existing meter or new meter standards not be met then for a meter with a diameter of 40mm or higher must be selected from a list of "pattern approved" meters.

The Interim Standard is clear that should any existing meter (including multi-jet, paddle wheel or propeller actuated types) fails or becomes faulty and cannot be repaired then a new meter is required and must meet the requirements of Table2, i.e. a electromagnetic or ultrasonic meter.

Our view is therefore that Sunwater is not replacing meters when they are still functioning and serviceable and that Sunwater is appropriately selecting meters for diameters greater than 600mm.

5.7 Dam safety addendum

We have reviewed Sunwater's Dam Safety Management Plan addendum and note that the uplift is due to a change in legislative requirements for hydrological models. The legislation changed in December 2023 after Sunwater had submitted its irrigation pricing proposal dated November 2023. The addendum is for an uplift of $1.7M in FY26, this expenditure type was allowed for in the Draft Report and therefore we include the uplift of $1.7M in our revised recommended expenditure below.

5.8 Revised recommended expenditure

Table 5-11 – Summary of recommended future renewals expenditure ($FY24, M)

	FY25	FY26-29	FY30-58
Sunwater Proposed (post-overhead)			
Total renewals expenditure	33.9	173.2[33]	594.3
Billing system renewal	-	38.2	-

[33] Updated figures in red font are due to additional dam safety modelling (revised ARR guidelines) costs of 1.7 million submitted by Sunwater in response to QCA's Draft Report

Non-billing renewals expenditure	33.9	135.0	594.3
Sunwater proposed (pre-overhead)			
Non-billing renewals expenditure	22.7	89.6	386.6
Adjustments (pre-overhead)			
Specific projects			
Meter renewal	(0.4)	(1.1)	(6.8)
Dam-related works	(0.6)	(0.3)	-
Ben Anderson Shutters	(0.7)	(0.1)	0.3
Wider program level			
Asset life adjustment	-	-	(3.4)
Recommended (pre-overhead)			
Non-billing renewals expenditure	21.0	88.1	376.7
Recommended labour cost (pre-overhead)	2.5	10.6	45.5
Renewals overhead			
Overhead on labour cost	4.8	20.5	87.0
Post-overhead recommended renewals expenditure	25.9	108.6	463.7
Efficiency challenge			
Catch-up efficiency	0%	3.5% - 10%	10%
Catch-up efficiency adjustment	-	(6.7)	(46.4)
Post-efficiencies recommended Renewals			
Total recommended non-billing renewals expenditure (post overhead)	25.9	101.9	417.3
Total adjustment	(8.1)	(71.3)	(177.0)
Billing system renewal			
Recommended billing renewals expenditure - allocation of cost using Sunwater's current approach	**-**	**5.0**	**-**
Adjustment to billing renewals expenditure	**-**	**(33.2)**	**-**
Total renewals expenditure			
Recommended total renewals expenditure	**25.9**	**107.0**	**417.3**
Adjustment to total renewals expenditure	**(8.1)**	**(104.5)**	**(177.0)**

Source: AtkinsRéalis analysis of renewals expenditure information including 10 WMS data Renewals Final Values.xlsx, Sunwater, December 2023 and Dam Safety Management Business Case_Addendum v1.pdf