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# Central Highlands Water: Review of expenditure forecasts

2023 Water Price Review

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FTI CONSULTING

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# Glossary

| Term | Definition |
|---|---|
| DEECA | Department of Energy, Environment and Climate Action, formerly DELWP |
| DELWP | Department of Environment, Land, Water and Planning |
| EA | Enterprise Agreement |
| ESC | Essential Services Commission |
| FTE | Full time equivalent |
| FTI Consulting | FTI Consulting (Australia) Pty Ltd |
| GL | Gigalitre |
| kWh | Kilowatt |
| ML | Megalitre |
| PEER | Public Entity Executive Remuneration |
| PREMO | Performance, Risk, Engagement, Management and Outcome |
| PS4 | Price Submission for the fourth regulatory period (2017-18 to 2022-23) |
| PS5 | Price Submission for the fifth regulatory period (2023-24 to 2027-28) |
| PV | Photovoltaic |
| RBA | Reserve Bank of Australia |
| SaaS | Software as a Service |
| Schneider | Schneider Electric Energy and Sustainability Services |
| SGC | Superannuation Guarantee Charge |
| WIRO | Water Industry Regulatory Order |
| WPI | Wage Price Index |
| WSAA | Water Services Association of Australia |

# Executive Summary

FTI Consulting has been engaged by the Essential Services Commission (the Commission) to undertake an independent expert review of the Victorian water businesses' forecast (controllable) operating and capital expenditure for the 1 July 2023 to 30 June 2028 (PS5) regulatory period.

The Commission is required to assess the water businesses' proposals against a legal framework set out in the *Water Industry Regulatory Order 2014*[1] and the Commission's PREMO pricing framework. We have assessed Central Highlands Water's forecast operating and capital expenditure based on the guidelines contained in the Commission's 2*023 Water Price Review: Guidance Paper.*

This report sets out our views as to whether Central Highlands Water's forecasts of capital and operating expenditure over the regulatory period can be reasonably assessed to be prudent and efficient.

## Forecast operating expenditure

Central Highlands Water has proposed an average net increase in controllable operating expenditure (growth less efficiency factor) of 1.2 per cent per year for the PS5 regulatory period. When compared to other water businesses, this places Central Highlands Water last of 13 urban water businesses subject to this review.

Central Highlands Water's forecast operating expenditure reflects:

- baseline 2021-22 expenditure of $63.3 million, which is 10.8 per cent above the benchmark allowance approved by the Commission in the previous price review
- total step changes to the baseline of $10.7 million across the PS5 regulatory period
- average growth in operating expenditure of 2.2 per cent per year and an efficiency factor of 1 per cent per year.

Based on Central Highlands Water's PS5 proposal, the further information provided and discussions to date, we have formed the view that most of the forecast operating

[1] The Water Industry Regulatory Order 2014 (WIRO) sits within the broader context of the *Water Industry Act 1994* (Vic) and the *Essential Services Commission Act 2001* (Vic).

expenditure is consistent with a prudent business operating efficiently. This reflects our view that:

- the expenditure in the 2021-22 baseline appears reasonable, and does not appear to include any items that are non-recurring
- most of the proposed step changes are reasonable and supported by a sound rationale.

However, we recommend that Central Highlands Water's controllable operating expenditure benchmark allowance for the PS5 regulatory period is adjusted by $4.5 million over the PS5 regulatory period to remove the step change for additional FTEs as shown in Table 1.

Central Highlands Water has also proposed an adjustment from its PS5 submission further reducing billing costs by $0.1 million over the PS5 regulatory period. Table 1 shows this as a separate adjustment to the benchmark allowance.

Together, these two adjustments resulted in step changes of $6.1 million over the PS5 regulatory period, compared to the $10.7 million proposed by Central Highlands Water.

Table 1: Recommended adjustments – controllable operating expenditure ($ 1 January 2023, millions)

| | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 |
|---|---|---|---|---|---|
| **Forecast controllable operating expenditure** | **66.08** | **67.16** | **68.49** | **68.92** | **70.02** |
| **Recommended adjustments** | | | | | |
| Step change - Additional FTEs | 0.30 | 0.60 | 0.90 | 1.20 | 1.50 |
| Step change - More frequent billing | 0.05 | 0.05 | | | |
| **Total recommended adjustments** | **0.35** | **0.65** | **0.90** | **1.20** | **1.50** |
| **Recommended adjusted controllable operating expenditure** | **65.73** | **66.51** | **67.59** | **67.72** | **68.52** |

## Forecast capital expenditure

Central Highlands Water has forecast capital expenditure of $256 million for the PS5 regulatory period. This is:

- 62 per cent more than its actual capital expenditure (including 2022-23 forecast) over the PS4 regulatory period
- 55 per cent more than the forecast capital expenditure outlook for the PS5 regulatory period that Central Highlands Water included in its PS4 submission.

Central Highlands Water's PS5 submission provides a comprehensive breakdown of its forecast capital expenditure for the PS5 regulatory period. The further information provided to us by Central Highlands Water in relation to the key issues for further investigation, including a half day workshop at its offices on 25 November 2022, provides a reasonable level of confidence that most of the proposed capital expenditure program is consistent with the actions of a prudent business operating efficiently.

However, based on our review, we recommend adjustments to the forecast capital expenditure for the projects and programs set out in Table 2 to address uncertainties in the timing of growth drivers late in the PS5 regulatory period and to address current uncertainties in project and program scopes.

With these adjustments included, our view is that the resulting forecast capital expenditure is justified, robust and capable of being delivered by Central Highlands Water in the PS5 regulatory period.

Table 2: Recommended adjustments to Central Highlands Water's benchmark allowance for capital expenditure ($ 1 January 2023, millions)

| Project/Program Description | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | Total PS5 Period | PS6 Period |
|---|---|---|---|---|---|---|---|
| **Ballarat Sewer Growth Project - Western & North-Western growth area** | | | | | | | |
| **Forecast capital expenditure** | 0.0 | 0.0 | 0.0 | 0.35 | 0.77 | 1.12 | 19.28 |
| Recommended adjustment | 0.0 | 0.0 | 0.0 | -0.35 | -0.77 | -1.12 | +1.12 |
| **Recommended adjusted capital expenditure** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **20.40** |
| **Ballarat Water Growth Project - Western & North-Western growth area** | | | | | | | |
| **Forecast capital expenditure** | 0.0 | 0.0 | 0.0 | 0.0 | 0.43 | 0.43 | 38.28 |
| Recommended adjustment | 0.0 | 0.0 | 0.0 | 0.0 | -0.43 | -0.43 | +0.43 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Recommended adjusted capital expenditure** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **38.70** |
| **Growth & Development Upsizing & Efficiency Program** | | | | | | | |
| **Forecast capital expenditure** | 2.8 | 2.4 | 2.4 | 2.4 | 2.4 | 12.4 | 10.0 |
| Recommended adjustment | -1.3 | -0.9 | -0.9 | -0.9 | -0.9 | -4.9 | 0.0 |
| **Recommended adjusted capital expenditure** | **1.5** | **1.5** | **1.5** | **1.5** | **1.5** | **7.5** | **10.0** |
| **ICT Business Solutions Enhancements** | | | | | | | |
| **Forecast capital expenditure** | 3.13 | 3.00 | 2.63 | 3.26 | 2.87 | 14.90 | 20.0 |
| Recommended adjustment | -1.13 | -1.00 | -0.63 | -1.26 | -0.87 | -4.90 | +4.90 |
| **Recommended adjusted capital expenditure** | **2.00** | **2.00** | **2.00** | **2.00** | **2.00** | **10.00** | **24.90** |
| **Total of all recommended adjustments:** | **-2.43** | **-1.90** | **-1.53** | **-2.51** | **-2.97** | **-11.35** | **+6.45** |

# 1 INTRODUCTION

## 1.1 Purpose of this report

The Essential Services Commission (the Commission) is reviewing submissions from 14 Victorian water businesses setting out their proposed prices and key service outcomes to apply to water and sewerage services commencing on 1 July 2023 through to 30 June 2028 (referred to in this report as the PS5 regulatory period).[2] Each of the Victorian water businesses, including Central Highlands Water, submitted their proposals to the Commission for assessment on 30 September 2022.

FTI Consulting has been engaged to undertake an independent expert review of the water businesses' operating and capital expenditure forecasts for the PS5 regulatory period. The scope of our review of operating expenditure is limited to controllable operating expenditure.

This report sets out our independent expert view of the prudency and efficiency of Central Highlands Water's capital and operating expenditure forecasts for the PS5 regulatory period, in accordance with the requirements of the regulatory framework.

## 1.2 Context and challenges facing Victorian water businesses

The environment faced by most Victorian water businesses over the last few years has been significantly more challenging than envisaged in 2018 when the Commission approved the expenditure forecasts used to set water prices for the 1 July 2018 to 30 June 2023 (PS4) regulatory period.

The COVID-19 pandemic has been one of the unforeseen events that has impacted the Victorian water businesses' expenditure in several ways, including:

- requiring additional water and wastewater monitoring and treatment
- increasing customer hardship due to cost-of-living pressures
- disrupting business operations, including the ability to carry out maintenance activities and higher rates of staff absenteeism
- changing work practices, including social distancing and hygiene requirements as well as transitioning to enable staff to work from home

[2] This includes 13 water businesses providing urban water and sewerage services include Barwon Water, Central Highlands Water, Coliban Water, East Gippsland Water, Gippsland Water, Goulburn Valley Water, GWMWater, Lower Murray Water, South East Water, South Gippsland Water, Wannon Water, Westernport Water and Yarra Valley Water and two businesses providing rural services including Lower Murray Water and Southern Rural Water.

- disrupting supply chains, putting pressure on the availability and cost of inputs
- increasing migration from Melbourne to regional areas.[3]

These impacts have affected each water business's actual and forecast expenditure in different ways. Some water businesses have faced new costs or cost pressures, while others have enjoyed cost savings.

The effects of the COVID-19 pandemic continue to be felt nearly three years later. Some of these impacts are moderating as Victoria (and the rest of the country) adapts to a new phase of living with the pandemic. However, there is the potential for other more permanent changes, including changes to work practices and greater migration of people from major cities to regional areas. At the time of this review, the longer-term implications remain unclear.

There are other events and changes that were unforeseen (or at least unable to be fully anticipated) as part of the Commission's previous water price review. These include:

- the continued impacts of climate change on the frequency and severity of major weather events, including drought, bushfires, and floods
- the continued evolution in climate change and environmental policy, including emission reduction strategies and targets, and associated compliance and reporting obligations
- a continued hardening of the insurance market, which also (at least partly) reflects the impacts of major climate-related events domestically and globally
- a ramping up of the need to do more to mitigate cyber security risks, including mandated obligations.

These issues and challenges ***do not*** imply or support a premise that:

- water businesses should continue to increase their operating and capital expenditure, and hence water and sewerage prices
- there should be lower expectations in terms of the need to drive efficiency savings in the longer term for the benefit of customers
- businesses should avoid responsibility for managing the risk of cost increases and/or passing more of those risks on to customers.

It further underlines the importance of scrutinising increases in expenditure, as well as proposed step changes, to ensure that they remain consistent with the actions of a prudent

[3] For example, refer: https://population.gov.au/sites/population.gov.au/files/2021-09/the-impacts-of-covid-on-migration-between-cities-and-regions.pdf, accessed 1 December 2022.

business operating efficiently, including in how it responds to the uncertainties and challenges in its operating environment. It also does not alter the standards that should be reasonably expected of businesses in supporting and justifying any increases in expenditure for the next regulatory period, including being able to provide adequate supporting documents (such as Board-approved policies or strategies and business cases).

## 1.3 Water industry regulatory framework

The water businesses' proposals are being assessed against a legal framework set out in the *Water Industry Regulatory Order 2014* (WIRO)[4] and the Commission's PREMO framework for approving prices.[5]

The Commission's regulatory framework places an emphasis on efficient delivery of services. Assessing the prudency and efficiency of a water business's expenditure forecasts is fundamental to achieving this objective.

In 2018, the Commission introduced a new approach called PREMO to regulate the prices charged by Victorian water businesses. As Figure 1.1 describes, the PREMO approach contains both new and conventional elements related to price, risk, engagement, management, and outcomes. PREMO provides water businesses with incentives to put forward their best offer to customers and deliver the outcomes its customers value most and to deliver these as efficiently as possible.

[4] The Water Industry Regulatory Order 2014 (WIRO) sits within the broader context of the *Water Industry Act 1994* (Vic) and the *Essential Services Commission Act 2001* (Vic).

[5] Essential Services Commission 2016, Water Pricing Framework and Approach: Implementing PREMO from 2018, October.

Figure 1.1: The Commission's PREMO framework


More conventional elements of PREMO include the retention of the building block approach, which provides reasonable certainty that prudent and efficient costs can be recovered. This includes an expenditure review to determine whether a water business's proposed capital and operating expenditure forecasts are consistent with the requirements of the regulatory framework.

Under the PREMO framework, each submission is expected to reflect the water business's best offer to its customer base. Submissions may be fast tracked through the assessment process based on several factors. Some water business proposals may require a more detailed review of their proposed expenditure while others may only require a review of some elements of their proposed expenditure (for example, specific items where expenditure is increasing).

The *2023 Water Price Review: Guidance Paper* (the Guidance Paper) explains the Commission's methodology and approach to assessing water businesses' price submissions and making a price determination and sets out the information each business is required to provide in its price submission.[6] The Guidance Paper also identifies the governing criteria for each component of the building block methodology, including forecast operating and capital expenditure.

This review is the second review under PREMO for these businesses. The Commission also expects price submissions to demonstrate how water businesses are building on their previous proposals to deliver value to their customers.

[6] Essential Services Commission 2021, 2023 Water Price Review: Guidance paper, 26 October.

## 1.4 Methodology and approach

The scope of our assessments is limited to examining water businesses' forecast controllable operating expenditure and capital expenditure over the PS5 regulatory period. It does not include examining decisions about whether to fast track a water business's PS5 submission, nor does it involve assessing other elements of the PREMO framework such as past performance or engagement.

Our methodology for assessing Central Highlands Water's capital and operating expenditure forecasts for the next regulatory period is consistent with the Commission's Guidance Paper. In summary, the scope of our review includes:

- for forecast operating expenditure, our assessment focuses on controllable expenditure only. We have assessed proposals using the base-step-trend approach as set out in the Commission's Guidance Paper and is consistent with the basis on which each water business has submitted information as part of their price review model templates
- for forecast capital expenditure, our assessment focuses on the top 10 major projects and major capital expenditure programs that comprise a significant proportion of the water business's total capital expenditure forecast.

Further detail about our assessment framework as it has been applied is set out in Section 3 (Operating expenditure assessment) and Section 4 (Capital expenditure assessment).

Our process has involved several steps:

- an initial review of PS5 price submissions, financial model templates and associated documents
- comparison of each of the water business's proposed capital and operating expenditure proposals, including assumptions adopted in relation to growth trends, efficiency factors, and comparison of actual and proposed expenditure
- a Stage 1 (preliminary) assessment workshop undertaken with Commission staff identifying the key issues to be explored in our more detailed review
- visits and/or online discussions with each of the water businesses on key issues related to their proposal
- further review and analysis of further information or explanations provided.

## 1.5 Structure of this report

The structure of this report is as follows:

- Chapter 2 provides a high-level summary of the Central Highlands Water's expenditure proposals
- Chapter 3 sets out our assessment of Central Highlands Water's operating expenditure proposals
- Chapter 4 sets out our assessment of Central Highlands Water's capital expenditure proposals.

Consistent with the Commission's guidance paper and the price review model completed by businesses, all forecasts and actuals are expressed in dollars as at 1 January 2023.

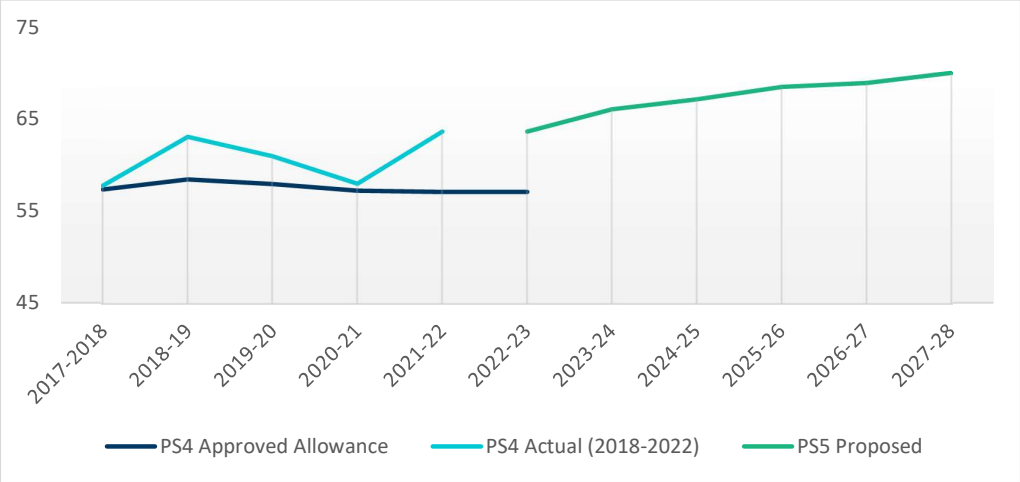
# 2 SUMMARY OF EXPENDITURE PROPOSAL

## 2.1 Forecast controllable operating expenditure

For the current PS4 regulatory period, the Commission approved a total controllable operating expenditure benchmark allowance for Central Highlands Water of $288 million ($ 1 January 2023).

For the first four years of the PS4 regulatory period, Central Highlands Water's actual controllable operating expenditure was $14.95 million (or 6.5 per cent) above the benchmark allowance approved by the Commission for those four years.

Figure 2.1: Central Highlands Water's actual and forecast controllable operating expenditure by year ($ 1 January 2023, millions)




'PS4 Approved Allowance' relates to the approved operating expenditure allowance for 2017-18 to 2022-23, and its 2018 forecast for 2023-24.

Source: Central Highlands Water, 2023 Price Review Model - 20220929, 3 October 2022; Essential Services Commission 2018, Central Highlands Water Determination Price Review Model: 1 July 2018 – 30 June 2023, 29 May.

Central Highlands Water's baseline 2021-22 controllable operating expenditure is $6.2 million (or 10.8 per cent) more than the benchmark allowance approved by the Commission in the last price review.

Central Highlands Water has proposed step changes to the baseline of $10.7 million across the PS5 regulatory period, comprising:

- $1.07 million on additional pumping costs (White Swan Dam Safety project)
- $1.25 million on support for vulnerable customers
- $0.38 million on Traditional Owners Uplift
- $0.4 million on more frequent billing (including digital metering)
- $0.15 million on Rainwater Tank Maintenance Program
- $1 million to move old stockpile of Biosolids
- $1.97 million on Sewerage Treatment Plant Lagoon Biosolids Remediation
- $4.5 million on an additional two full time equivalent (FTE) positions per year.

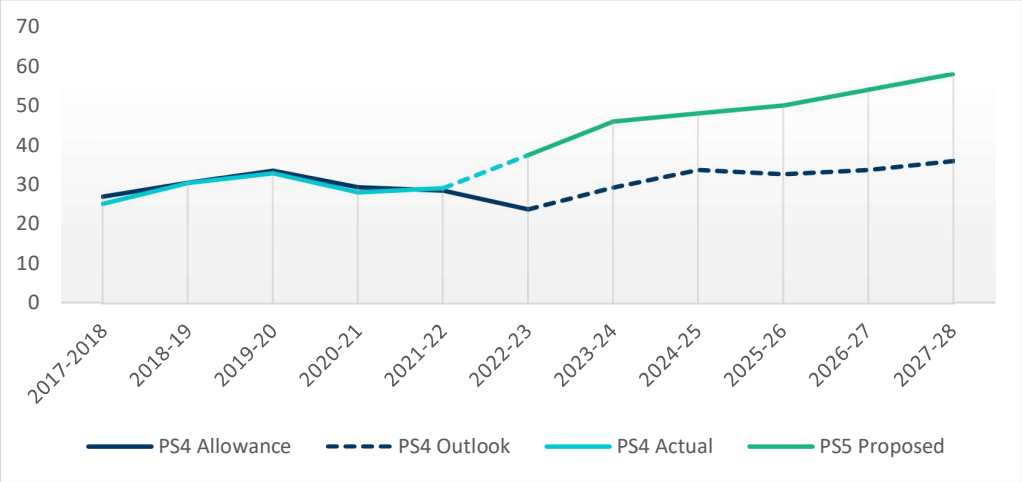
Central Highlands Water has forecast an average growth factor for operating expenditure of 2.2 per cent per year in line with forecast connection growth during the PS4 regulatory period. It is targeting cost efficiency of 1 per cent over the PS5 regulatory period, giving a net cost growth of 1.2 per cent per year.

## 2.2 Forecast capital expenditure

Central Highlands Water has forecast capital expenditure of $256 million for the PS5 regulatory period. As shown in Figure 2.2, this is:

- 62 per cent more than its actual capital expenditure (including 2022-23 forecast) over the PS4 regulatory period
- 55 per cent more than the forecast capital expenditure outlook for the PS5 regulatory period that Central Highlands Water included in its PS4 submission.

Figure 2.2: Central Highlands Water's actual and forecast capital expenditure by year ($ 1 January 2023, millions)




'PS4 Approved Allowance' relates to the approved capital expenditure allowance for 2017-18 to 2022-23, and the business's 2018 forecast for 2023-24 to 2027-28.

Source: Central Highlands Water, CHW_2023 Price Review Model - 2021-10-26, 3 October 2022; Essential Services Commission 2018, Central Highlands Water Determination Price Review Model: 1 July 2018 – 30 June 2023, 29 May.

The key drivers, projects and programs are:

- Growth (43.2 per cent of the total capital expenditure program)
- Improvement/compliance (33.4 per cent of the total capital expenditure program)
- Renewals (23.3 per cent of the total capital expenditure program)
- top 10 major projects, which appear well defined and appropriately costed ($116.2 million) including six growth driven projects (total of $72.6 million) and deployment of digital meters ($13 million)
- five major programs ($56.2 million) as outlined in Table 2.1

- 51 other smaller capital program allocations across a range of service, asset and driver categories and projects that carry over into the PS6 regulatory period ($83.6 million).

Table 2.1: Central Highlands Water's major capital programs ($ 1 January 2023, millions)

| Program allocation description | Forecast expenditure |
|---|---|
| Growth and Development Upsizing and Efficiency Program | 12.4 |
| Information and Communication Technology (ICT) Business Solutions Enhancements | 14.9 |
| Water Main Renewals Program | 10.0 |
| Clear Water Storage Tank Rehabilitation Program | 9.9 |
| Sewer Gravity Main Renewals Program | 9.0 |
| **Total** | **56.2** |

Source: Central Highlands Water, 2023-28 Price Submission and associated Financial Model, 30 September 2022.

Table 2.2 sets out Central Highlands Water's top 10 capital expenditure projects which account for 45.4 per cent of its forecast capital expenditure for the PS5 regulatory period.

Table 2.2: Central Highlands Water's top 10 capital expenditure projects ($ 1 January 2023, millions)

| Major capital expenditure project | Forecast expenditure |
|---|---|
| Ballarat Sewer Growth Project - Ballarat West Urban Growth Zone southern section | 17.30 |
| Ballarat Sewer Build - Ballarat East Trunk Sewer (Stage 2) | 14.50 |
| White Swan Dam Safety Improvement | 13.15 |
| Digital Water Metering | 13.0 |
| Ballarat Water Growth Project - Northern Growth Area | 12.95 |
| Ballarat Sewer Build - Ballarat South Outfall Project | 12.14 |
| Regional Recycled Water Scheme Upgrades | 9.50 |
| Daylesford Water Treatment Plant Upgrade | 8.96 |
| Daylesford Superpipe Raw Water Interconnection | 8.50 |

| | |
|---|---|
| Ballarat Sewer Growth Project - Northern growth area | 6.23 |

Source: Central Highlands Water, 2023-28 Price Submission and associated Financial Model, 30 September 2022.

# 3 OPERATING EXPENDITURE ASSESSMENT

## 3.1 Overview of assessment approach

The Commission's Guidance Paper notes the requirement that forecast operating expenditure is:

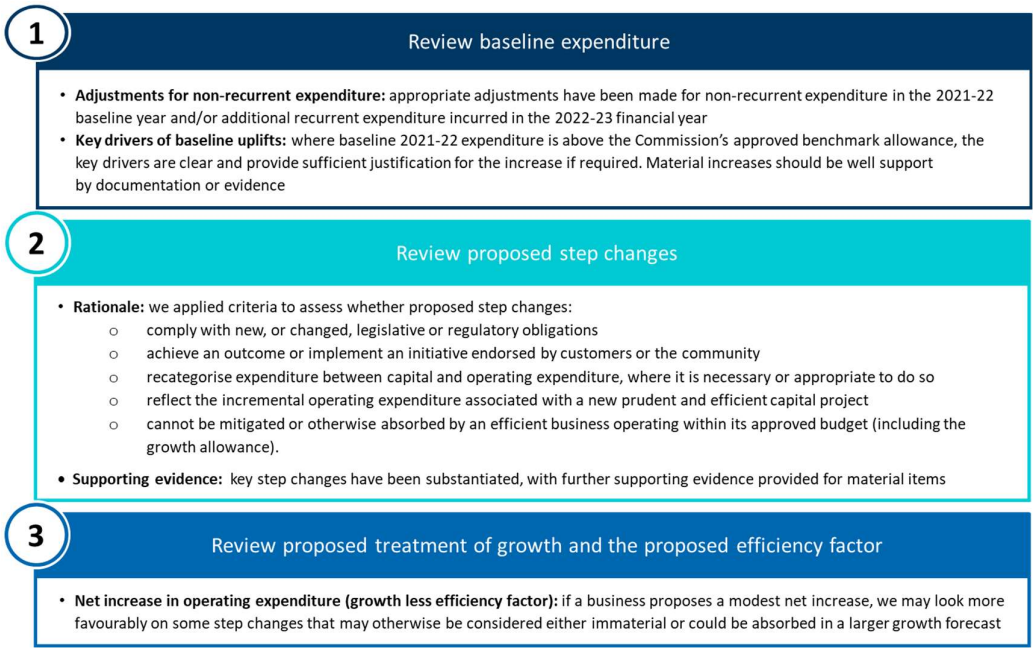
> *… operating expenditure which would be incurred by a prudent service provider acting efficiently to achieve the lowest cost of delivering on service outcomes over the regulatory period, taking into account a long-term planning horizon (prudent and efficient forecast operating expenditure).*[7]

The Commission has asked us to provide an independent expert view on whether Central Highlands Water's controllable operating expenditure is prudent and efficient having regard to the base-step-trend approach and assessment criteria set out in its Guidance Paper.

We have assessed whether forecast operating expenditure is consistent with the actions of a prudent business acting efficiently, including if:

- the established 2021-22 controllable operating expenditure baseline has been appropriately adjusted for any one-off expenditure items and efficiency commitments
- operating costs reflect reasonable cost efficiency/productivity assumptions applied to the 2021-22 baseline operating expenditure, having regard to industry trends
- changes in operating costs are consistent with the timing of major capital projects
- operating costs can fulfil the business's obligations and meet customer service expectations as efficiently as possible
- any forecast divergence from historical trends in operating expenditure can be readily explained, for example, by changes in obligations imposed by government, including technical, regulatory and customer service expectations.

[7] Essential Services Commission 2022, 2023 Water Price Review: Guidance Paper, August Amendment, p.28.




Each business's growth and efficiency factors will reflect their business and operating environment, and as discussed in section 1, over the PS4 regulatory period some businesses have experienced materially higher than expected growth.

In assessing proposed increases in expenditure, including step changes, we have had regard to each business's approach to allowing for growth and efficiency, and the resulting net growth factor for the PS5 regulatory period. For example, some businesses have proposed more ambitious efficiency targets (resulting in negative net growth in expenditure over the PS5 regulatory period) and/or have sought to recognise economies of scale in allowing for growth.

This is relevant to considering the business's ability to absorb cost increases, including proposed step changes, which has required us to apply judgement in assessing the reasonableness of the business's proposals.

## 3.2 Key operating expenditure drivers across water businesses

There are several drivers of increased operating expenditure over the current PS4 regulatory period and/or forecast for the PS5 regulatory period that are common across water businesses, as summarised in Table 3.1.

Appendix A presents more detailed analysis and cross-industry metrics for electricity, labour and IT costs, using information submitted by the businesses in their respective Price

Review Models. We have not sought to directly benchmark these costs across the water businesses as the requirements of each business vary. However, such comparisons do further assist in identifying those businesses that might be looking at more material increases in expenditure. It also provides some context for assessing these costs for each business. A summary of the key implications of this analysis for our assessment approach is provided below.

Table 3.1: Common operating expenditure issues

| Expenditure category | What we have examined |
|---|---|
| **Electricity** | The application of the Schneider Electric Energy and Sustainability Services (Schneider) electricity price forecasts,. Schneider was commissioned by Intelligent Water Networks to prepare an electricity price forecast that could be consistently applied by all of the water businesses.<br><br>The approach to meeting the Victorian water sector's commitment to the State Government to source 100 per cent of their energy requirements from renewables by 2025, recognising that each business's approach will reflect its own circumstances and operating environment (this can also include capital projects). |
| **Labour** | The rationale for any material growth in employee numbers.<br><br>Remuneration increases, having regard to each organisation's Enterprise Agreement (EA) as well as conditions in labour markets, with several regional businesses citing challenges in attracting and maintaining people with the right skills. Some businesses have also referred to the Victorian Government's 2022 Public Entity Executive Remuneration (PEER) review of executive remuneration. |
| **IT** | Software as a Service (Saas), with all businesses either having transitioned, or being in the process of transitioning, to cloud-based services. This has also resulted in expenditure that would have been classified as capital expenditure now treated as operating expenditure.<br><br>Cyber security, which is an important issue for all water businesses as well as utilities and other corporations more generally. This includes compliance with new obligations. |

## Electricity costs

The information submitted by each of the businesses indicates that most are applying the 75$^{th}$ percentile of Schneider's long-term forecast of the electricity spot price. In its report, Schneider assumes that the water businesses are most likely to enter a contract rather than

remain exposed to spot prices and that contract price will be around the 75th percentile of its forecast.[8]

This conclusion reflects the likelihood that generators will require a 'premium' above their expected spot price to enter a contract because:

- A premium will be required for the generator to be willing to forgo opportunities to sell that capacity if prices rise above the expected spot price (recognising that the generator is also benefiting if prices fall).
- If it is 'caught short' in terms of its ability to deliver the contracted capacity, it may need to go into the market to procure the shortfall at the prevailing spot price and is therefore exposed to short-term price increases.

Given this, we consider that relying on the 75th percentile of the Schneider forecasts appears reasonable.

We have reviewed each business's proposed energy expenditure within the context of its total forecast controllable operating expenditure proposal. Some businesses have proposed step changes for green power costs, which we have assessed on its own merits.

### IT expenditure

As with other costs, we have not sought to directly benchmark IT operating expenditure across the businesses. This is because the needs of each business are likely to vary due several factors, including its size, customer base, the nature and scope of its operations and the age and maturity of its IT architecture and systems. Some businesses may also need to undertake capital expenditure.

We have assessed proposed increases for IT expenditure as proposed by each business on their own merits. We have used this context to satisfy ourselves that the level of IT expenditure for each business is reasonable and justified, particularly for those businesses that appear higher on the comparative metrics.

For businesses that have proposed material increases in IT expenditure which have contributed to increases in baseline expenditure and/or step changes, we have sought to assess whether:

- it appears reasonable for the business to be incurring this expenditure, having regard to necessity/risk as well as the expected benefits
- it is supported by appropriate evidence, such as an IT strategy or business plan

[8] Schneider Electric 2022, Electricity Price Forecast, Covering FY23 to FY28, Base Case, 23 March, p.17.

- the evidence aligns with the forecasts proposed in the business's Price Review Model.

### Labour costs

As for IT expenditure, we have used the labour cost information in Appendix A as context when assessing each business's proposed operating expenditure. For most businesses identifying increases in labour costs, this has tended to be a combination of increases in staffing as well as remuneration.

For businesses that have proposed material increases in labour-related expenditure (either as reflected in a baseline uplift and/or step change), we have reviewed the rationale for the proposed increase and sought further supporting information where relevant. This included material increases in FTE numbers and/or increases in remuneration. Where increases have also been attributed to the Superannuation Guarantee Charge (SGC), we have confirmed with the business that this reflects an increase in total remuneration payable.

The following sections summarise our assessment of Central Highlands Water's forecast controllable operating expenditure for the PS5 regulatory period.

## 3.3 Assessment of the baseline

After adjusting for non-recurring items, Central Highlands Water's adjusted controllable operating expenditure in 2021-22 was $63.3 million compared to the $57.1 million benchmark allowance approved by the Commission. This represents an increase in actual expenditure (including the 2022-23 forecast) above the benchmark allowance of $6.2 million (or 10.8 per cent). Table 3.2 shows how the baseline operating expenditure has been derived.

Table 3.2: Central Highlands Water's baseline operating expenditure ($ 1 January 2023, millions)

| | Actual expenditure |
|---|---|
| 2021-22 prescribed operating expenditure | 64.95 |
| **Less** | |
| Storm damage | 0.74 |
| Switchboard | 0.58 |
| Price submission costs | 0.32 |
| | **1.64** |
| **Adjusted baseline 2021-22 controllable operating expenditure** | **63.31** |

Source: Central Highlands Water, Central Highlands Water - 2023 Price Submission Price Review Model, 3 October 2022.

Our approach to assessing the reasonableness of the baseline expenditure involves considering whether:

- any overspend against the benchmark allowance is consistent with what is required by a prudent business operating efficiently
- the expenditure includes any items that are non-recurring.

Central Highlands Water's submission[9] outlines the key drivers for its 10.8 per cent overspend but did not separately quantify these drivers. While noting that a number of these drivers are common to other businesses, we sought a further breakdown of these costs from Central Highlands Water given the materiality of the overspend relative to the 2021-22 benchmark allowance.

Central Highlands Water provided further information as set out in Table 3.3.

Table 3.3: Overspend of 2021-22 controllable operating expenditure against the benchmark allowance by driver ($ 1 January 2023, millions)

| Category | Description | Actual expenditure |
|---|---|---|
| **Compliance costs** | Increase in 30 new or amended obligations[10] has resulted in an increase in reporting, assurance, attestation, and auditing across many. While some of these costs were absorbed, other costs were not, requiring expenditure above the benchmark allowance. | 0.1 |
| **Victorian Protective Data Security Standards (VPDSS)** | To meet the comprehensive compliance requirements of the VPDSS, Central Highlands Water has added 2 FTE dedicated to this program ($0.15 million per FTE). In addition, external vendor support has also increased to drive compliance costs in IT systems ($0.1 million per year). | 0.4 |
| **Occupational Health & Safety** | A review of the civil maintenance program identified several improvement opportunities to ensure Central Highlands Water continues to provide a safe environment for staff, contractors, customers and the community. These contract revisions have added additional costs to the | 1.3 |

[9] Central Highlands Water 2022, Price submission 2023-28, September, Table 14.2, pp.70-72.

[10] Inxure Strategy Group 2022, Compliance Obligation Assessment for the Victorian Water Corporations, June.

| | | |
|---|---|---|
| | operating cost base. A new senior safety position has also been created and, more recently, additional roles dedicated to staff wellbeing have been created. | |
| **Additional compliance activities** | Other new compliance activities which have required investment in FTE staff include the following: Asset Management Accountability Framework, Social Procurement, Gender Equity, Emissions reduction, General Environmental Duty and Environmental Site Improvement plans. | 0.3 |
| **Accommodating growth and supply chain impacts to costs** | Central Highlands Water's recent acceleration in connection growth has resulted in total connections being 4.1 per cent higher in 2021-22 than forecast in the 2018 Price Submission. This in turn has led to some material cost increases including additional staffing resources in those functions directly impacted, including Land Development, Asset Planning and Maintenance and Meter Reading. Costs have increased in the following areas:<br>• fuel costs (both cost per litre and additional growth areas) – $0.1 million<br>• water and wastewater – $0.5 million<br>• repairs and maintenance costs – $0.3 million<br>• professional services advice and support – $0.2 million. | 1.1 |
| **COVID-19 pandemic** | During the pandemic, Central Highlands Water invested in new technology to ensure service to customers continued without any significant impact. This included additional digital platforms for staff, online training opportunities to ensure compliance with all legislative requirements and an increase in labour hire costs to manage staff on leave because of COVID-related illness. Costs have increased in the following areas:<br>• Additional cleaning costs: $0.1 million<br>• Recruitment costs (staff turnover continues to be an ongoing impact from COVID with the market opened for employees to work remotely): $0.3 million<br>• Labour hire costs: $0.5 million<br>• Increase in software as a service-related costs as part of moving to a digital workplace: $0.6 million | 1.5 |

| | | |
|---|---|---|
| **Insurance costs** | Central Highlands Water purchases insurance policies collectively with other Victorian Water Corporations, the cost of which have increased significantly in recent years. | 0.3 |
| **Other FTE and associated costs** | This expenditure relates to:<br>• increased customer hardship costs related to responding to pandemic and ongoing challenges – $0.3 million<br>• additional FTEs in customer service to support customers (Central Highlands Water is in the fourth quartile of customer satisfaction ratings) – $0.4 million[11]<br>• additional IT and digital support including to manage cybersecurity risks – $0.4 million<br>• Reconciliation Action Plan ongoing activities and engagement – $0.1 million. | 1.2 |

Source: Central Highlands Water 2022, Email to FTI Consulting, Reconciliation of Opex to PR2018, 9 December 2022.

### 3.3.1 Compliance costs

Central Highlands Water noted that compliance costs have increased in part due to additional reporting, assurance, attestation requirements, and more onerous auditing across many obligations. This has driven increased expenditure on professional services related to specialised skills not available in-house and assurance (probity auditors). Some costs have been absorbed, while others have not. Overall, an additional $0.1 million has been required in 2021-22.

We consider that Central Highlands Water has provided adequate substantiation of the baseline increase attributable to compliance costs and the magnitude of the costs appear reasonable.

### 3.3.2 Victorian Protective Data Security Standards

Central Highlands Water incurred additional operation expenditure in 2021-22 of $0.4 million to meet the Victorian Protective Data Security Standards.[12] This included two additional FTEs ($0.15 million per FTE) and external vendor support for IT systems ($0.1

[11] Total FTEs have increased from 190.7 in 2018-19 to 197.8 as at 30 June 2022.

[12] https://ovic.vic.gov.au/information-security/standards/.

million). Given the need for water companies to put greater resources into IT systems and data security, we consider this amount to be reasonable and likely recurrent.

In our review of cross industry spend on ICT (see Appendix A), we found that Central Highlands Water was generally on the lower end of ICT operating expenditure per water connections ($ per average number of water connections, 1 January 2023). Caution needs to be exercised in drawing conclusions from these comparisons as the need for IT expenditure in the PS5 regulatory period will depend on the level of maturity of each business's IT infrastructure. We have therefore only referred to this information for context. It has not directly informed our assessment of this proposed step change.

Overall, we consider that Central Highlands Water has provided adequate substantiation of the baseline increase attributable to Victorian Protective Data Security Standards costs and the magnitude of the costs appear reasonable.

### 3.3.3 Occupational health and safety

A review of Central Highlands Water's civil maintenance program identified several improvement opportunities to ensure Central Highlands Water continues to provide a safe environment for staff, contractors, customer and the community. This amounted to $1.3 million in 2021-22 and includes:

- $0.1 million on FTEs – additional roles dedicated to staff wellbeing
- $1.2 million on changes to contracts for civil maintenance – including traffic management and road reinstatements, and a new senior safety position.

Central Highlands Water noted in discussions with FTI Consulting that there was strong staff support for the wellbeing initiatives in the aftermath of the pandemic. We expect these expenditures to be recurrent and we consider that Central Highlands Water has provided adequate substantiation of the baseline increase attributable to occupational health and safety, and the magnitude of the costs appear reasonable.

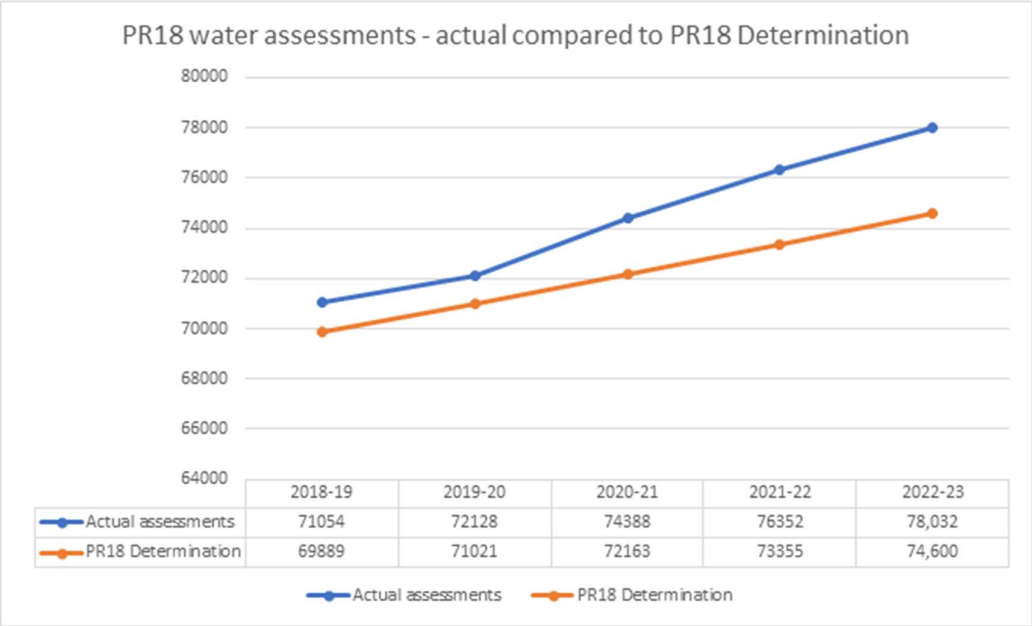
### 3.3.4 Additional compliance activities

Additional FTE staff have been required to undertake additional compliance activities in relation to Asset Management Accountability Framework, Social Procurement, Gender Equity, Emissions reduction, General Environmental Duty and Environmental Site Improvement plans, amounting to $0.2 million in 2021-22. We expect these compliance related expenditures to be recurrent. We consider that Central Highlands Water has provided adequate substantiation of the baseline increase attributable to additional compliance activities and the magnitude of the costs appear reasonable.

### 3.3.5 Accommodating growth and supply chain impacts to costs

Central Highlands Water noted that the number of active connections increased significantly over the PS4 regulatory period, driving an increase in operating expenditure. Figure 3.1 shows the uplift in growth experienced in 2021-21 (the top blue line). The final 2022-23 actual figure (78,032 assessments) is an estimate but YTD figures (77,196 as at 30 November 2022) suggest that this figure will be achieved.

Figure 3.1: Central Highlands Water actual connections compared to forecast in PS4 regulatory period ($ 1 January 2023, millions)




Source: Central Highlands Water 2022, Email to FTI Consulting, Reconciliation of Opex to PR2018, 9 December.

Central Highlands Water indicated that the 4.1 per cent increase in total connections in 2021-22 above the forecast in the 2018 price submission has led to cost increases (including addition staffing resources) in functions directly impacted, including Land Development, Asset Planning and Maintenance, and meter reading. This includes operating expenditure related to repair and maintenance costs ($0.3 million).

The additional repair and maintenance expenditure relates to:[13]

[13] Central Highlands Water 2022, Email to FTI Consulting, 22 December.

- additional fencing and associated works around growth areas
- additional grounds maintenance around assets in growth areas
- ongoing weed control
- ongoing fire prevention control and works
- additional routine mains and tank cleaning
- additional wastewater monitoring
- additional water monitoring.

Central Highlands Water noted that the trend towards increasing costs commenced prior to the PS5 regulatory period and as a result, the baseline costs does not include the additional costs that it has absorbed over the last two years from the higher growth rates.

We consider that Central Highlands Water has provided adequate substantiation of the baseline increase attributable to customer growth and the magnitude of the costs appear reasonable.

### 3.3.6 COVID-19 pandemic

The COVID-19 pandemic saw Central Highlands Water invest in new technology to ensure service to customers including additional digital platforms for staff, online training opportunities to ensure compliance with all legislative requirements and an increase in labour hire costs to manage staff on leave due to COVID-related illness. Costs also relate to recruitment costs and software as a service cost in moving to a digital workplace. This amounted to $1.5 million in 2021-22. We expect these costs to be recurrent as staff continue to work remotely ('digital workplace') and as such we accept their inclusion in the baseline.

### 3.3.7 Insurance costs

Internal and external factors drove increases in the base premium for 2022-23, increasing by 16 per cent from 2021-22. Factors included rain events in South Australia, Queensland and New South Wales and adverse developments in the consolidated Victorian Water Corporations liability claims record resulting in premium increases, as well as global events like the war in Ukraine affecting the insurance market. This additional cost amounted to $0.3 million in 2021-22. Insurance costs have increased across most Victorian water businesses, and we expect that premiums could stay elevated for the foreseeable future and, as such, these costs will be recurrent.

### 3.3.8 Other FTE and associated costs

These costs amounted to $1.2 million in 2021-22 and relate to increasing customer hardship costs ($0.3 million), additional IT and digital support including cybersecurity risk

($0.4 million), Reconciliation Action Plan activities ($0.1 million) and additional FTEs in customer service ($0.4 million). The additional FTEs in customer service are based on Central Highlands Water being rated in the fourth quartile of customer satisfaction ratings.

We consider that Central Highlands Water has provided adequate substantiation of the baseline increase attributable to FTEs in customer service roles and we expect that these costs will be ongoing.

### 3.3.9 Summary of our baseline assessment

Central Highlands Water is proposing a material increase in its 2021-22 baseline expenditure of $6.2 million. We have reviewed all key drivers of this increase and are satisfied that they have been substantiated and the costs are reasonable. The baseline does not appear to include any items that are non-recurring.

## 3.4 Assessment of step changes

Central Highlands Water has proposed a step change increase to its baseline 2021-22 controllable operating expenditure of $10.7 million across the next regulatory period, comprising additional employee costs and additional costs associated with new capital projects.

We have focused our assessment on step change increases only on the basis that these increases are likely to be reflected in the baseline controllable operating expenditure in the next regulatory period. We assessed the reasonableness of those step change increases by examining whether the proposed step changes meet one or more of the following criteria:

- comply with new, or changed, legislative or regulatory obligations
- achieve an outcome or implement an initiative that is endorsed by customers or broadly meets accepted changes in community expectations
- recategorisation of expenditure between capital and operating expenditure, where the business can demonstrate that it is necessary or appropriate to do so
- incremental operating expenditure associated with a new prudent and efficient capital project
- sufficiently material that the costs are not able to be met by an efficient business operating within its approved budget (including the growth allowance) or be otherwise mitigated.

Table 3.4 outlines Central Highlands Water's proposed step changes.

Table 3.4: Central Highlands Water's proposed step changes (1 January 2023, millions)

| Key step changes | $ million | Explanation |
|---|---|---|
| Support for vulnerable customers | 1.25 | Double support for vulnerable customers through two programs administered through state government. |
| Traditional Owners uplift | 0.38 | A four-fold increase in support for the Traditional Owner partnership program from $0.02 to $0.1 million per year through a range of partnership programs such as social procurement and land management contracts. |
| More frequent billing (including digital metering) | 0.40 | An additional meter read will be introduced (until digital metering is implemented) which will provide for quarterly billing. |
| Rainwater tank maintenance program | 0.15 | A rainwater tank maintenance rebate for approximately 200 connected properties in the 3 non-potable systems of Raglan, Amphitheatre and Redbank with a rebate of $750 per connected property to improve water quality. |
| White Swan Dam additional pumping | 1.07 | The White Swan Dam Safety Improvement capital project will require the reservoir levels be reduced for rectification works. Water will need to be accessed via pumping from the Goldfields Superpipe to maintain reservoir levels within the contract defects period. Pumping costs of $1.1 million will be incurred over a three-year period. |
| Move old stockpile of Biosolids | 1.00 | Additional biosolid management costs are required to ensure Central Highlands Water meets the requirements of the PFAS NEMP (Per- and poly-fluoroalkyl substances National Environment Management Plan) for PFAS contaminants in biosolids in association with Central Highlands Water's EPA General Environmental Duty obligations. |
| Sewerage Treatment Plant Lagoon Biosolids Remediation | 1.97 | Relates to ongoing accumulation of biosolids related sludge, particularly in treatment lagoons, but also in storage lagoons at wastewater |

| | | |
|---|---|---|
| | | treatment plants, and falls under an EPA General Environmental Duty. |
| Additional FTE | 4.50 | Relates to two recurring additional FTEs (one per cent increase) per year at $0.15 million required to meet service commitments in roles across Capital Delivery, ICT & Digital, customer service. |
| **TOTAL** | **10.72** | |

### 3.4.1 Support for vulnerable customers – $1.25 million

Central Highlands Water proposes to double its support for vulnerable customers from $0.25 million to $0.5 million per year. The current annual spend involves two programs administered by the now Department of Energy, Environment and Climate Action (DEECA, formerly the Department of Environment, Land, Water and Planning, DELWP)[14] and one in-house program aimed at helping customers reduce their water use and sustainably lower their costs:

- Community Housing Retrofit Program – $0.1 million per year
- Community Rebate Program (CRP) – $0.3 million per year
- Central Highlands Water Hardship relief grants – $0.1 million per year.

Central Highlands Water also provides support through its customer assistance program including adding funds to the CRP, financial assistance with water bills and a range of other vulnerable customer support.

Central Highlands Water's proposal to double financial support for vulnerable customers received customer support from the Deliberative Assembly.[15] It was also suggested that funds be used to improve water services for vulnerable customers rather than just focusing on waiving bills, for example, if there was still substandard home plumbing such as leaking, old inefficient fixtures and fittings. Central Highlands Water provided extensive detail on

[14] Formerly the Department of Environment, Land, Water and Planning (DELWP); https://www.water.vic.gov.au/liveable/using-water-wisely/community-support.

[15] Central Highlands Water's customer engagement included a Deliberative Assembly for 39 randomly selected members that were broadly representative of the Central Highlands Water catchment area. Members were recruited from 100 responses received in relation to an invitation sent to households across the Central Highlands Water service area. The 39 assembly members were randomly selected based on a stratified sampling process to represent a cross section of the customer service area. See Central Highlands Water 2022, Engagement Report Stage 3 Deliberative Assembly, 30 June; Central Highlands Water.

customer engagement to support for vulnerable customers and we are satisfied that this provides sufficient grounds for this proposed expenditure.[16]

The information provided by Central Highlands Water sufficiently demonstrates that customers support financial assistance for vulnerable customers. This reflects the approach that it applied in testing this proposal with customers, as well as demonstrating the activities and costs underpinning this expenditure. We are therefore of the view that this proposed step change meets the criteria related to achieving an outcome or implementing an initiative that is endorsed by customers or broadly meets accepted changes in community expectations.

### 3.4.2 Traditional Owners Uplift – $0.4 million

Central Highlands Water proposes to increase support for the Traditional Owner partnership program from $0.02 to $0.1 million per year through a range of partnership programs such as social procurement and land management contracts. This expenditure was well supported by customers.[17]

Based on our criteria outlined in section 3.1, we are satisfied that such expenditures meet the criteria related to achieving an outcome or implement an initiative that is endorsed by customers or broadly meets accepted changes in community expectations.

### 3.4.3 More frequent billing (including digital metering) – $0.40 million

Central Highlands Water currently reads water meters and bills customers three times per year. It proposes to introduce an additional meter read and quarterly billing until digital metering is implemented. This is consistent with other major utility providers and provides the customer benefit of lower average bills, which will assist with customers' cash flow and improved ability to pay on time, and in turn reduce bad debt risk to Central Highlands Water.

An additional metering round will cost approximately $0.2 million per year for 2023-24 and 2024-25. Central Highlands Water subsequently revised this amount to $0.15 million per year for 2023-24 and 2024-25.[18] The costs include contract labour and mailing costs.

[16] Central Highlands Water 2022, Engagement Report Stage 3 Deliberative Assembly, 30 June; Central Highlands Water 2022, Deliberative Assembly Recap and Draft Outcomes key assumption scenarios; Central Highlands Water 2022, Community Engagement Panel PR23 update, 4 August.

[17] Central Highlands Water 2022, Engagement Report Stage 3 Deliberative Assembly, 30 June, p.51.

[18] Central Highlands Water 2022, Email to FTI Consulting, 9 December.

This initiative was well supported during the customer engagement program to vulnerable customers and customers with financial hardship.[19]

The information provided by Central Highlands Water sufficiently demonstrates that customers support more frequent billing, as demonstrated through extensive customer engagement. Given the level of customer support, we are of the view that this proposed step change meets the criteria related to achieving an outcome or implementing an initiative that is endorsed by customers or broadly meets accepted changes in community expectations.

### 3.4.4 Rainwater Tank Maintenance Program – $0.15 million

This expenditure involves providing a rainwater tank maintenance rebate of $750 to approximately 200 connected properties in the three non-potable systems of Raglan, Amphitheatre and Redbank. The program aims to improve water quality and comprises $0.03 million per year over the PS5 regulatory period.

We note that Central Highlands Water is forecasting average growth in operating expenditure of 2.2 per cent per year and an efficiency factor of 1 per cent per year over the PS5 regulatory period. This results in a net increase in operating expenditure over the PS5 regulatory period of 1.2 per cent per year. This ranks Central Highlands last out of the 13 water businesses (see

[19] Central Highlands Water 2022, Engagement Report Stage 3 Deliberative Assembly, p.17.

Table 3.5).

Given the substantially high growth forecast for operating expenditure over the PS5 regulatory period, we would typically propose to remove this expenditure ($0.15 million) from the step change. However, this project was supported by customers[20] and we are satisfied that this provides sufficient grounds for its inclusion in the step change. Based on our criteria above in section 3.1, we are of the view that this proposed step change meets the criteria related to achieving an outcome or implement an initiative that is endorsed by customers or broadly meets accepted changes in community expectations.

### 3.4.5 White Swan Dam additional pumping – $1.07 million

The White Swan Dam Safety Improvement capital project will require the reservoir levels be reduced for rectification works.

This operating expenditure supports the third largest major capital expenditure project for the PS5 regulatory period ($13.1 million) to ensure Ballarat's White Swan Dam meets national dam standards and the dam wall meets acceptable risk thresholds. The White Swan Reservoir level will initially be lowered to 50 per cent full capacity to allow extensive dam wall remediation work to be undertaken. Water will need to be pumped from the Goldfields Superpipe to maintain reservoir levels within the contract defects period. Pumping costs of $1.1 million will be incurred over a three-year period.

Year 1 and Year 2 operating expenditure enables pumping of 971 ML each year from the Goldfields Superpipe allowing White Swan Reservoir to continue to supply water to Ballarat to meet agreed levels of service while rehabilitation work is underway.

Year 3 operating expenditure enables 3,000 ML of water to be pumped from the Goldfields Superpipe to White Swan to refill it to 100 per cent to test the effectiveness of the remediation works within the contract's 12-month defects period.

As this project has been clearly identified as appropriate and necessary to comply with Australian National Council on Large Dams guidelines and supports proposed capital expenditure (see Sections 4.2.3 and 4.3.1), we consider this expenditure meets the criteria related to incremental operating expenditure associated with a new prudent and efficient capital project.

### 3.4.6 Move old stockpile of Biosolids – $1 million

Central Highlands Water note that some PFAS chemicals have been globally identified as of high concern to human health and the environment, particularly due to their persistence

[20] Central Highlands Water, Engagement Report Stage 3 Deliberative Assembly, 22 June, p.31.

and bioaccumulation. PFAS in biosolids is an emerging environmental issue as it is a pathway to human exposure / contamination through the reuse of biosolids in agriculture.

Central Highlands Water manages several direct biosolid sources through the Ballarat South Waste Water Treatment Plant (producing 12,000 wet tonnes per year), the Ballarat North Waste Water Treatment Plant (contracted thermal drying) and the Clunes Biosolids facility which dries and stockpiles naturally dried biosolids from Central Highlands Water sources.

Central Highlands Water forecasts that additional biosolid management costs of $0.2 million per year are required to meet the requirements of the PFAS NEMP (National Environment Management Plan) contaminants in biosolids consistent with its EPA General Environmental Duty obligations.[21]

We consider this expenditure to be reasonable as it supports compliance with regulatory obligations around PFAS chemicals and likely cannot be absorbed by the business operating within its approved budget. Based on our criteria above in section 3.1, we consider that these expenditures meet the criteria related to compliance with new, or changed, legislative or regulatory obligations.

### 3.4.7 Sewerage Treatment Plant Lagoon Biosolids Remediation – $1.97 million

This expenditure is driven by the ongoing accumulation of biosolids related sludge, particularly in treatment lagoons, but also in storage lagoons at wastewater treatment plants, and falls under an EPA General Environmental Duty. Central Highlands Water notes that this is a normal aspect of lagoon operations and requires periodic desludging of lagoons. The current PS4 regulatory period benchmark allowance does not provide for lagoon desludging. Lagoon biosolids remediation costs are expected to be $0.39 million per year in the PS5 regulatory period and are not expected to continue into the PS6 regulatory period.

We were generally satisfied that these items were prudent and efficient, and reinforced by detailed costings, including the lagoon biosolids remediation work (Jacobs report).[22] Based on our criteria above in section 3.1, we consider that these expenditures meet the criteria related to compliance with new, or changed, legislative or regulatory obligations.

[21] https://www.epa.vic.gov.au/for-community/environmental-information/pfas/pfas-national-environmental-management-plan

[22] Central Highlands Water 2022, Email to FTI Consulting, IS2600C9-MEM-001 Lagoon Sludge Management Plan Rev 0 Final , 22 December.

### 3.4.8 Additional FTE – $4.5 million

This proposed step change relates to two recurring additional FTEs (one per cent increase) involving an additional $0.15 million per year over the PS5 regulatory period to meet service commitments in roles across Capital Delivery, ICT & Digital and customer service.[23]

We queried the additional FTEs and whether there was an overlap with additional FTEs provided for in the baseline. Central Highlands Water noted that the additional nine FTEs included in the step change are required to manage the uplift in digital transformation projects.[24] A number of these roles are five-year fixed term contracts which enables Central Highlands Water to reconsider what roles are required once the uplift in the digital program of works has been completed. Central Highlands Water subsequently reduced these FTE costs by $0.2 million.[25]

There are a number of considerations in assessing this step change. First, as noted previously, Central Highlands Water is forecasting average growth in operating expenditure of 2.2 per cent per year and an efficiency factor of 1 per cent per year over the PS5 regulatory period, resulting in a net increase in operating expenditure over the PS5 regulatory period of 1.2 per cent per year. This ranks Central Highlands last out of the 13 water businesses (see

[23] Total FTEs have increased from 190.7 in 2018-19 to 197.8 as at 30 June 2022.

[24] Central Highlands Water 2022, Email to FTI Consulting, 22 December.

[25] Central Highlands Water 2022, Email to FTI Consulting, 9 December.

Table 3.5). Second, we note that baseline operating expenditure already includes $0.4 million on FTEs in customer service roles (see section 3.3.8). We expect that these costs will recur and have included them in the baseline.

Third, in section 4.3.2 below, we reviewed the capital expenditure associated with the proposed ICT Business Solutions Enhancements program and propose to reduce the capital expenditure proposed for the PS5 period. While the proposed expenditures for these specific initiatives appear to be well justified and appropriate, our review has noted that there is ongoing work in progress to better refine and scope many elements of the broader program. We understand that Central Highlands Water is preparing an overarching ICT and digital strategy, but this is yet to be finalised. We note this report recommends that the benchmark allowance for capital expenditure on the ICT Business Solutions Enhancements program be reduced from $14.9 million to $10 million (see Table 4.3 in section 4.3.2 below).

Finally, Central Highlands Water has not substantiated this step change in terms of detail around the FTE roles. It has been noted that there are nine roles across capital Delivery, ICT & Digital and customer service. Central Highlands Water subsequently noted that the roles relate to the uplift in digital transformation projects. In the Project Justification Report for ICT enhancements,[26] Central Highlands Water notes that the ongoing annual operating and maintenance cost estimate for uplift / enhancement to additional digital / ICT initiatives is $1.45 million. It is not clear how this $1.45 million relates to the $4.5 million proposed step change.

Overall, having regard to all of the above factors we consider that Central Highlands Water has not provided sufficient justification or detail to justify the appropriateness of this step change item in terms of meeting any of the criteria in section 3.1. We recommend that Central Highlands Water's benchmark allowance for controllable operating expenditure is adjusted to remove the forecast expenditure associated with this step change.

### 3.4.9 Summary of our step change assessment

Based on Central Highlands Water's PS5 submission, the further information provided and our step change criteria, we consider that most of Central Highlands Water's proposed step changes are reasonable.

[26] Central Highlands Water, 2B-01 - Project Justification Report PJR - ICT Enhancements, p.13.

We have also considered these within the context of Central Highlands Water's proposed net annual growth in expenditure over the PS5 regulatory period, which is 1.2 per cent per year and ranks as last among all urban water businesses.

We recommend one adjustment to Central Highlands Water's forecast controllable operating expenditure in relation to the step change for additional FTEs. This adjustment has the effect of reducing Central Highlands Water's benchmark allowance for controllable operating expenditure by $4.5 million over the PS5 regulatory period as shown in Table 3.6.

As noted previously, Central Highlands Water also proposed to reduce billing costs by $0.1 million to $0.3 million over the PS5 regulatory period. This results in a benchmark allowance for controllable operating expenditure of $6.1 million over PS5 regulatory period, a reduction of $4.6 million compared to the proposed amount of $10.7 million by Central Highlands Water.

We do not propose any further adjustments to these step changes as the evidence supports a conclusion that they are consistent with a prudent business operating efficiently.

## 3.5 Proposed electricity cost pass-through

Central Highlands Water is proposing to introduce a pass-through mechanism to address the volatility and uncertainty in the energy market.[27] As this is a regulatory mechanism for risk and uncertainty, this is not within the scope of our review.

However, a comparison of Central Highlands Water's operating expenditure with other water businesses does not support a different treatment for Central Highlands Water as a cost pass-through.

## 3.6 Forecast growth and efficiency factors

Central Highlands Water is forecasting average growth in operating expenditure of 2.2 per cent per year and an efficiency factor of 1 per cent per year over the PS5 regulatory period. This results in a net increase in operating expenditure over the PS5 regulatory period of 1.2 per cent per year. When comparing this net result against other water businesses, Central Highlands Water ranks last out of 13 urban water businesses subject to this review (see

[27] Central Highlands Water 2022, Price Submission 2023-28.

Table 3.5).

Table 3.5: Net average increase in operating expenditure per year by business (%)

| Water business | Net average annual increase |
|---|---|
| South East Water | -0.9% |
| GWMWater | -0.8% |
| Wannon Water | -0.3% |
| Gippsland Water | -0.2% |
| Yarra Valley Water | -0.2% |
| Lower Murray Water (Urban) | 0.0% |
| Barwon Water | 0.1% |
| South Gippsland Water | 0.2% |
| Westernport Water | 0.5% |
| Coliban Water | 0.5% |
| East Gippsland Water | 0.7% |
| Goulburn Valley Water | 1.1% |
| **Central Highlands Water** | **1.2%** |

Source: Calculated from pricing models submitted by each of the Victorian water businesses to the Commission, 30 September 2022. water businesses.

## 3.7 Summary of controllable operating expenditure assessment

Based on Central Highlands Water's PS5 submission, discussions with the business and the further information it provided, most of the operating expenditure in 2021-22 is consistent with a prudent business that operates efficiently.

This reflects our view that for most of Central Highlands Water's forecast controllable operating expenditure:

- the key drivers of most of the overspend against the baseline appear reasonable, and the baseline does not appear to include any items that are non-recurring
- most of the proposed step changes are reasonable and supported by a sound rationale
- it is not reasonable to expect that these step changes could be absorbed by the business within the net growth factor of 1.2 per cent per year.

We recommend one adjustment to Central Highlands Water's forecast controllable operating expenditure for the PS5 regulatory period to remove the step change for additional FTEs ($4.5 million).

This adjustment has the effect of reducing Central Highlands Water's forecast controllable operating expenditure by $4.5 million over the PS5 regulatory period as shown in the table below. As noted previously, Central Highlands Water also proposed to reduce billing costs by $0.1 million to $0.3 million over PS5. This gives a final step change amount of $6.1 million over the PS5 regulatory period, a reduction of $4.6 million compared to the proposed amount of $10.7 million by Central Highlands Water.

Table 3.4: Recommended adjustments to Central Highlands Water's benchmark allowance for forecast controllable operating expenditure ($ 1 January 2023, millions)

| | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 |
|---|---|---|---|---|---|
| **Forecast controllable operating expenditure** | **66.08** | **67.16** | **68.49** | **68.92** | **70.02** |
| **Recommended adjustments** | | | | | |
| Step change - Additional FTEs | 0.30 | 0.60 | 0.90 | 1.20 | 1.50 |
| Step change - More frequent billing | 0.05 | 0.05 | | | |
| Total recommended adjustments | 0.35 | 0.65 | 0.90 | 1.20 | 1.50 |
| **Recommended adjusted controllable operating expenditure** | **65.73** | **66.51** | **67.59** | **67.72** | **68.52** |

# 4 CAPITAL EXPENDITURE ASSESSMENT

## 4.1 Overview of assessment approach

The Commission's Guidance Paper states that forecast capital expenditure is:

> *…. capital expenditure that would be incurred by a prudent service provider acting efficiently to achieve the lowest cost of delivering service outcomes, taking into account a long-term planning horizon (prudent and efficient forecast capital expenditure).*[28]

We have assessed Central Highlands Water's proposed capital expenditure program against the criteria set out in Figure 4.1.

Figure 4.1: Capital expenditure assessment criteria


Having regard to these criteria, we have also considered whether any adjustments to the proposed expenditure forecast would be considered appropriate, material and justified.

We have assessed Central Highlands Water's forecast capital expenditure for the PS5 regulatory period focusing primarily on a review of asset management, capital planning and prioritisation frameworks and processes and how they have been applied. We have also reviewed key supporting documents for:

- all top 10 capital expenditure projects
- the Growth and Development Upsizing and Efficiency program

[28] Essential Services Commission, 2023 Water Price Review: Guidance Paper, August 2022 Amendment, p.33.

- the Information and Communication Technology (ICT) Business Solutions Enhancements program
- the Water Main Renewals program
- the Clear Water Storage Tank Rehabilitation program
- the Sewer Gravity Main Renewals program.

Our assessment is based on Central Highlands Water's PS5 submission and responses to additional information requests we raised based on the above criteria. We also conducted a half day workshop session with Central Highlands Water on 25 November 2022 at its Wendouree office to explore this information and additional related queries in more detail.

Central Highlands Water's PS5 submission supporting its proposed capital expenditure program was comprehensive and provided good context and justification in relation to the forecast expenditure increase and associated drivers. However, to further test the justification for the substantial increase in capital expenditure forecasts for the PS5 regulatory period compared to PS4 regulatory period forecasts, we requested additional information as follows:

- justification for expenditure above the Commission's benchmark allowance for the PS4 regulatory period
- justification for forecast increased expenditure trend for the PS5 regulatory period, particularly relating to growth and improvement/compliance drivers
- background to the drivers, scope and expected benefits for the ICT and digital enhancements program and proposed digital metering deployment program
- background and context relating to proposed growth projects and programs and how they align with current and forecast future development activities in growth areas.

Central Highlands Water provided good responses addressing the additional information requested. This included documents and discussion at the 25 November workshop explaining the capital planning processes used to develop the program, relevant papers and reports, project justification and risk assessment reports. Appendix B contains a list of documents provided by Central Highlands Water and reviewed as part of our assessment of its proposed capital expenditure program.

## 4.2 Assessment of overall capital program

Central Highlands Water is on track to deliver a moderately higher level of capital expenditure for the PS4 regulatory period than the benchmark allowance approved by the Commission as part of the last price review. This reflects higher than forecast growth in new urban development zones around Ballarat and to construction cost escalation above

the consumer price index. Central Highlands Water has also forecast a significant increase in capital expenditure for the PS5 regulatory period, driven by continued growth in the Ballarat region.

### 4.2.1 Link to customer outcomes and obligations

The key drivers, projects and programs, which appear to be well aligned with relevant obligations, customer outcomes and engagement results, are:

- growth (43.2 per cent of the total capital expenditure program)
- improvement/compliance (33.4 per cent of the total capital expenditure program)
- renewals (23.3 per cent of the total capital expenditure program)
- ten major projects, which appear well defined and appropriately costed ($116.2 million) – including deployment of digital meters ($13 million)
- five major programs ($56.2 million) relating to growth and development, ICT and digital enhancement, sewer and water main renewals and treated drinking water storage tank rehabilitation.

The supporting project justification and risk assessment report documents reviewed provide good justification for the projects and programs that underpin the overall capital expenditure program and forecast. They also provide insight into how each element of the program aligns with supports Central Highlands Water's three key customer outcomes:

- customer care (improved customer support and response, achievement of guaranteed service levels and implementation of more frequent billing)
- equity (ensuring more equitable development, funding and sharing of services and opportunities across customers and the community, including funding regional growth)
- sustainability (continuing to reduce negative environmental impacts whilst maintaining provision of services and value to customers).

### 4.2.2 Comparison of forecast and actual capital expenditure – PS4

Central Highland Water's actual capital expenditure (including forecast for 2022-23) for the PS4 regulatory period is $158.0 million. This is approximately $12.3 million (or 8.4 per cent) higher than the benchmark allowance approved by the Commission in the last price review. The key drivers of this greater than forecast expenditure include:

- expenditure brought forward due to higher than forecast growth relating to:
  - Ballarat North Sewer – planning and design
  - Relocation, protection and upgrade works for key water mains in Ballarat driven by Regional Roads Victoria road intersection upgrades

  - Cherry Flat Road sewer pump station works
  - water and sewer main upsizing works associated with development growth
- construction cost escalation.

These increases in capital expenditure were partially offset by $1.5 million in savings for the Ballarat South wastewater treatment plant inlet works upgrade project through innovation efficiencies.

Delivery performance for the $58.3 million top 10 major PS4 projects program has been good overall, with three completed on time and four delayed but now complete. A further two projects are scheduled to commence in early 2023, with one of these carrying over into the PS5 regulatory period as the Ballarat Sewer Build - Ballarat South Outfall major project. The Maryborough Wastewater Reuse Scheme Improvements project was partially completed during the PS4 regulatory period, with further works transitioning into the PS5 regulatory period as part of the Regional Recycled Water Scheme Upgrades major project.

The planned $8.6 million Digital Water Metering Deployment program, which was meant to start in 2018-19, was delayed because of an unsuccessful tender process. The existing procurement process was terminated by Central Highlands Water in May 2022. This program is now expected to be implemented through the digital water metering major project in the PS5 regulatory period, with a revised forecast capital expenditure of $13 million.

The documents and information provided by Central Highlands Water provide good support and reasonable explanations for the moderate increase in expenditure in the PS4 regulatory period.

### 4.2.3 Forecast capital expenditure – PS5

Central Highlands Water's capital expenditure forecast for the PS5 regulatory period is $256.0 million. This is:

- 62 per cent more than its actual capital expenditure (including 2022-23 forecast) over the PS4 regulatory period
- 55 per cent more than the forecast capital expenditure outlook for the PS5 regulatory period that Central Highlands Water included in its PS4 submission.

The key driver for this forecast increased expenditure is growth, with a forecast $110.6 million capital expenditure over the PS5 regulatory period compared to $24.7 million for growth in the Commission's PS4 determination.

Importantly, as highlighted by the planned expenditure on growth for the PS4 regulatory period, Central Highlands Water's capital expenditure on growth has been relatively low

between 2005 and 2020, despite an average rate of growth of around 1.7 per cent per year across its service region. Progressive use of existing service system spare capacity and optimised operation within existing systems over that period has enabled Central Highlands Water to absorb the major impacts of growth. However, the aggregated impacts of growth have now significantly reduced system capacity buffers and the potential for further optimised operation of existing systems for both water and sewerage services. As a result, the capacity for these systems to accommodate further growth is now substantially diminished. In addition to the high rates of growth currently experienced and forecast to continue over the coming five years in the urban development zones around Ballarat, this is now driving a need to significantly increase investment to support growth.

Forecast capital expenditure for renewals over the PS5 regulatory period is steady relative to the PS4 regulatory period, whilst forecast expenditure on improvement/compliance drivers show around a 33 per cent increase ($21.6 million) compared to the PS4 regulatory period. This increase on improvement/compliance accounts for $43.6 million in forecast capital expenditure related to the following four major projects:

- White Swan Dam Safety Improvement (compliance with Australian National Council on Large Dams guidelines) – $13.1 million
- Daylesford Superpipe Raw Water Interconnection (service improvement to provide adequate water resource supply reliability for Daylesford) – $8.5 million
- Daylesford Water Treatment Plant Upgrade (compliance with safe drinking water guideline and health-based target requirements following introduction of the new Superpipe raw water source) – $9.0 million
- Digital Water Metering (service improvement through enhanced customer information and support, reduction in meter reading safety risks and reduction in water wastage) – $13.0 million.

The forecast capital expenditure is also projected to continue to increase significantly into the PS6 regulatory period, mainly due to a significant forecast further increase in growth expenditure (a projected 76 per cent increase compared to the PS5 regulatory period forecast). Renewals expenditure is expected to increase by around 48 per cent in the PS6 regulatory period compared to the PS5 regulatory period, with compliance/improvement expenditure expected to increase by around 17 per cent.

Central Highlands Water has deferred and rescheduled approximately $144 million of identified potential capital expenditure from the PS5 regulatory period forecast into the PS6 regulatory period using a risk-based prioritisation process. This includes:

- $7.5 million to achieve the 2035 net-zero greenhouse gas emissions target

- $5.0 million for purchasing permanent water shares
- $10.0 for small town sewerage schemes
- $5.0 million for upgrading regulated non-potable water supply systems
- approximately $34.6 million for wastewater treatment upgrades at the Ballarat North and South plants and other regional plants (based on optimised asset management solutions to maintain service standards and compliance)
- approximately $19.1 million on various water treatment plant, water main renewal and wastewater treatment plant capacity improvement projects because of scheduling works over two stages across the PS5 and PS6 regulatory periods
- approximately $63 million for key growth-related projects.

Based on the information included in Central Highlands Water's PS5 submission, the further information provided and workshop discussions on the 25 November 2022, we consider that there is good support for the capital expenditure projects and programs proposed for the PS5 regulatory period. The documents and information provided show that the capital expenditure is justified, reasonable and supported by appropriate capital planning processes and good documents and project justification and risk assessment reports.

However, we recommend adjustments to the forecast expenditure profiles for some projects and programs to address uncertainties relating to growth driven timing and scope. These recommendations are outlined in Section 4.3.

### 4.2.4 Underlying processes for developing the program

Central Highlands Water's PS5 submission outlines its underlying asset management and capital planning processes, including risk assessment and prioritisation processes. Based on its PS5 submission, additional documents provided and workshop discussions on 25 November 2022, we consider that Central Highlands Water's underlying processes for developing its capital expenditure program are reasonable and appropriate and fit for purpose. Central Highlands Water provided good evidence demonstrating that these processes have been applied to develop the PS5 capital expenditure program, with appropriate executive team and Board oversight.

Central Highlands Water advised us that it is looking to develop better and more integrated information technology support and automation for these processes. For example, it is currently trialling InfoAsset (a multi-user software platform purposely built for management of water supply, sewerage and stormwater network assets) to improve its management and analysis of data from its sewer main video inspection program. It also plans to extend the application of this software package to other asset management applications for both water and sewer assets, based on the outcomes of these pilot trials.

Other related information technology support initiatives are also planned to improve asset planning and management systems as part of the broader ICT Business Solutions Enhancements program. These improvement initiatives will be important for further enhancing Central Highlands Water's asset and capital planning processes into the future.

The project justification and supporting risk assessment reports provided for review are generally appropriately detailed and well prepared, providing a good level of confidence that the associated capital expenditures proposed are well justified. The proposed programs, projects and associated expenditures are well linked to a risk-based assessment of needs. The prioritisation process used across the overall capital program appears to appropriately balance risks between Central Highlands Water and its customers and between different expenditure drivers and appears to have been applied in an appropriate manner to refine the final proposed program. As noted above, this process has resulted in approximately $144 million of potential expenditure being deferred beyond the PS5 regulatory period as a result of growth timing uncertainties, optimised asset management and staged scheduling of projects.

### 4.2.5 Reliability of cost estimation

Central Highlands Water's approach to cost estimation appears to be reasonable and appropriate and fit for purpose for establishing its project and program budgets. Projects and programs are supported by project justification reports that assess alternative options and include appropriate concept level scoping to provide a basis for cost estimation, including development of concept design reports, and detailed designs for some projects (eg. the White Swan Dam Safety Improvement project). Cost estimates have been developed based on currently available cost and pricing information, with P50 estimates developed as the basis for project and program budgets. Full risk-based Monte Carlo analysis techniques have been used to estimate P5, P50 and P95 costs for all 10 major projects to provide a comprehensive understanding of the range of cost risks to inform budget development. Tendered prices have also been used for three of the ten major projects and two of the five major programs, incorporating competitive contract rates.

Central Highlands Water's cost estimation approach appears to provide a reasonable and appropriate basis for developing the budget estimates for its PS5 capital expenditure program.

### 4.2.6 Deliverability of capital program

Central Highlands Water has actively sought to boost internal capacity and build and strengthen external relationships in design and construction markets to prepare for its

delivery of the larger PS5 capital expenditure program. This is also supported by a strong preparation and planning focus in project and program development as evidenced by:

- most major projects being supported by concept designs, detailed designs or technical specifications
- tendering is progressing on:
  - the $12.1 million Ballarat Sewer Build – Ballarat South Outfall project
  - the $8.5 million Daylesford Superpipe Raw Water Interconnection project
- tendering and contract award has now been complete on the $13 million Digital Water Metering project.

Recruiting for a Head of Capital Delivery and a Senior Project Manager, to bolster internal resourcing capability in the Capital Delivery Team, is also now complete. With these new positions in place, further recruiting will focus on additional project manager and contract officer positions.

Other delivery capability enhancements now implemented include:

- development of enhanced digital tools to streamline processes and improve project tracking and reporting
- contracts in place for delivering major programs and capital work packages
- leveraging collaboration with industry partners to streamline delivery, including:
  - private sector construction through land development models
  - using Central Highlands Water's Engineering Services partnership to secure expert services and resources
  - delivering works via Central Highlands Water's Public Private Partnership service contract
  - using existing contractors to deliver capital works.

In summary, there appears to be good progress on implementing delivery program enhancement initiatives, providing a good level of confidence that robust arrangements will be ready and in place to support implementation of the proposed capital expenditure program.

## 4.3 Assessment of major projects and major programs

### 4.3.1 Major projects

Central Highland Water's PS5 capital program includes 10 major projects with a combined forecast cost over the period of $116.2 million (approximately 45.4 per cent of the total program). These projects are outlined in Central Highlands Water's PS5 submission and summarised in more detail in specific Project Justification Reports provided to us for review.

We reviewed Project Justification Reports and related supporting and background documents (including associated risk assessment reports) for all 10 major projects. These documents are appropriately detailed, well focused and provide strong and robust justification for the major projects and associated expenditures. The proposed expenditures appear to be appropriately targeted based on sound risk assessment approaches. We note that the following five major projects driven by urban development growth in the Ballarat region have been well targeted to the Ballarat Northern Growth area and the Ballarat West Urban Development Zone southern section (Cambrian Hill growth zone):

- Ballarat Water Growth Project – Northern Growth Area project ($13.0 million)
- Ballarat Sewer Growth Project – Ballarat West Urban Development Zone southern section (17.3 million)
- Ballarat Sewer Build – Ballarat South Outfall Project ($12.1 million)
- Ballarat Sewer Build – Ballarat East Trunk Sewer Stage 2 ($14.5 million)
- Ballarat Sewer Growth Project – Northern growth area (6.2 million).

Together these major projects account for a total of $63.1 million of capital expenditure in the PS5 regulatory period, equivalent to 54 per cent of the total major project expenditure, and 24.6 per cent of the overall program expenditure.

The Northern Growth area is already seeing the release of 6,000 lots for development with construction scheduled over the next five years. The Cambrian Hill growth area (effectively an extension to the existing Ballarat West Urban Development Zone) is currently subject to a rezoning request through DEECA (formerly the Department of Environment, Land, Water and Planning). A further 2,000 lots are expected to be released for development and for construction to commence over the next five years.

Central Highlands Water has generally deferred capital expenditure to the PS6 regulatory period where it relates to servicing growth in the Ballarat North West and Ballarat Western growth areas not yet subject to rezoning applications (with 6,000 and 13,000 lots planned for development respectively, likely beyond the next five years). However, it has included

the following expenditure forecasts in its PS5 submission in anticipation of the need to service growth in these areas:

- Ballarat Sewer Growth Project - Western and North-Western growth area ($1.12 million in the PS5 regulatory period, and $19.28 million in the PS6 regulatory period)
- Ballarat Water Growth Project - Western and North-Western growth area ($0.43 million, with $38.3 million in the PS6 regulatory period).

A further $57.6 million of forecast capital expenditure for these two projects is proposed for the PS6 regulatory period.

Overall, our view is that the forecast capital expenditure for the growth related major projects reviewed is well justified and is consistent with providing services to support timely development without over investing prematurely.

However, given the large increase in forecast capital expenditure for the PS5 regulatory period and the uncertainty of timing with respect to rezoning and land release in the Western and North-Western growth areas of Ballarat, we recommend that the forecast expenditure for the water and sewerage growth projects to service those areas (which will be key major projects in the PS6 regulatory period) should be rescheduled to the PS6 regulatory period. Table 4.1 sets out our recommended adjustments.

Table 4.1: Recommended adjustments related to forecast capital expenditure for the Western and North-Western Ballarat growth areas water and sewerage growth projects ($ 1 January 2023, millions)

| Project/Program Description | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | Total PS5 Period | PS6 Period |
|---|---|---|---|---|---|---|---|
| **Ballarat Sewer Growth Project - Western & North-Western growth area** | | | | | | | |
| **Forecast capital expenditure** | 0.0 | 0.0 | 0.0 | 0.35 | 0.77 | 1.12 | 19.28 |
| Recommended adjustment | 0.0 | 0.0 | 0.0 | -0.35 | -0.77 | -1.12 | +1.12 |
| **Recommended adjusted capital expenditure** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **20.40** |
| **Ballarat Water Growth Project - Western & North-Western growth area** | | | | | | | |
| **Forecast capital expenditure** | 0.0 | 0.0 | 0.0 | 0.0 | 0.43 | 0.43 | 38.28 |
| Recommended adjustment | 0.0 | 0.0 | 0.0 | 0.0 | -0.43 | -0.43 | +0.43 |
| **Recommended adjusted capital expenditure** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **38.70** |

In summary, our review of Central Highlands Water's 10 major projects for the PS5 regulatory period has helped confirm the appropriateness and robustness of the forecast capital expenditure associated with major projects and provided good insight into the strong underlying basis for the broader capital program. In particular, our review established that the proposed major projects are:

- appropriate in relation to key drivers and obligations
- strongly linked to customer service needs and demonstrated customer preferences
- supported by robust analysis and assessment
- appropriately costed.

This provides a high level of confidence that the major projects proposed for the PS5 regulatory period and the associated expenditure forecasts are appropriate.

### 4.3.2 Major programs

Central Highlands Water provided us with Project Justification Reports and related supporting and background documents, including risk assessment reports for the following five major programs:

- Growth and Development Upsizing and Efficiency program ($12.4 million)
- ICT Business Solutions Enhancements program ($14.9 million)
- Water Main Renewals program ($10.0 million)
- Clear Water Storage Tank Rehabilitation program ($9.0 million)
- Sewer Gravity Main Renewals program ($9.0 million).

The supporting documents related to the water main renewals, clear water storage tank rehabilitation and sewer gravity main renewal program are detailed, well focused and provide strong and robust justification for the proposed program objectives and associated expenditures. The forecast capital expenditures for each of these programs are well prioritised and appropriately targeted based on assessed levels of asset and service risk.

These three programs have been developed based on strong, detailed analysis and assessment of needs and benefits and are:

- appropriate in relation to key drivers and obligations
- strongly linked to customer service needs and demonstrated customer preferences
- supported by robust analysis and assessment, including the application of appropriate risk-based assessment and prioritisation
- appropriately costed.

We therefore do not recommend any adjustments to the forecast capital expenditure for these three programs but do recommend adjustments to the forecast capital expenditure for the other two major programs, as outlined below.

The proposed Growth and Development Upsizing and Efficiency program provides funding for developers to upsize or reposition water and sewer assets at Central Highlands Water's request, above and beyond what would otherwise be required for their developments in isolation, to maintain overall consistency with the broader development servicing plans and to provide additional system capacity to optimise the broader system configuration. The cost estimates included for this program are based on an assessment of projects undertaken during the PS4 regulatory period (and associated expenditures), with an additional contingency allowance. However, we note from our review that the expenditure

for the works relating to this program during the PS4 regulatory period were heavily influenced by the following two large projects:

- Cherry Flat Trunk Sewer ($2 million)
- North Ballarat Trunk Sewer ($2 million).

The forecast PS5 regulatory period expenditure is based on a high-cost scenario that includes these types of larger scale works, as it is possible that these types of works may also occur in the PS5 regulatory period. The PS5 regulatory period forecast therefore includes an allowance of $2 million per year, plus an annual contingency of around $0.5 million per year. Given the uncertainty relating to the timing of the growth drivers for the works included in this program, as well as uncertainty in scope, our view is that the cost estimates for this program should be based on a lower cost scenario of $1.5 million per year, without additional contingency allowance. This also appears reasonable in the context of the significantly higher forecast expenditure for growth included in the broader PS5 capital program. We therefore recommend the forecast capital expenditure adjustments as outlined in Table 4.2.

Table 4.2: Recommended adjustments to benchmark allowance for capital expenditure for the Growth and Development Upsizing and Efficiency program ($ 1 January 2023, millions)

| Project/Program Description | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | Total PS5 Period | PS6 Period |
|---|---|---|---|---|---|---|---|
| **Growth & Development Upsizing & Efficiency Program** | | | | | | | |
| **Forecast capital expenditure** | 2.8 | 2.4 | 2.4 | 2.4 | 2.4 | 12.4 | 10.0 |
| Recommended adjustment | -1.3 | -0.9 | -0.9 | -0.9 | -0.9 | -4.9 | 0.0 |
| **Recommended adjusted capital expenditure** | **1.5** | **1.5** | **1.5** | **1.5** | **1.5** | **7.5** | **10.0** |

The proposed ICT Business Solutions Enhancements program provides funding for a range of important capability and system improvement initiatives, including to:

- enable the business to better use its operational data
- enable smarter processes to increase operational efficiency
- enhance collaboration technologies and devices to modernise ways of working
- embed customer focus through uplifting channels of engagement
- enhance Central Highlands Water's Information Security stance
- enable the business to make better use of the operational data.

The documents reviewed and the outcomes of discussions at the 25 November workshop provide good justification for the overall program. Many of the planned initiatives outlined in the Project Justification Report for this program provide support enhancing asset management and planning systems and other key business systems and improvement initiatives (such as digital metering deployment). The proposed expenditures for these specific initiatives appear to be well justified and appropriate.

However, our review has noted that there is ongoing work in progress to better refine and scope many other elements of the broader program and to clarify the associated benefits. We understand that Central Highlands Water is preparing an overarching ICT and digital strategy, but this is yet to be finalised, and has not been provided for our review.

As such, our view is that given the uncertainty in relation to scope and expected benefits relating to some elements within the overall program, and that the overarching strategy is still in development, it would be appropriate to defer some of the forecast capital expenditure for the ICT Business Solutions Enhancements program to the PS6 regulatory period when there will be much greater certainty in relation to the overall strategy and

benefits and scope of all elements of the program. We therefore recommend the forecast capital expenditure adjustments to this program outlined in Table 4.3.

Table 4.3: Recommended capital expenditure forecast adjustments for the ICT Business Solutions Enhancements program ($ 1 January 2023, millions)

| Project/Program Description | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | Total PS5 Period | PS6 Period |
|---|---|---|---|---|---|---|---|
| **ICT Business Solutions Enhancements** | | | | | | | |
| **Forecast capital expenditure** | 3.13 | 3.00 | 2.63 | 3.26 | 2.87 | 14.90 | 20.0 |
| Recommended adjustment | -1.13 | -1.00 | -0.63 | -1.26 | -0.87 | -4.90 | +4.90 |
| **Recommended adjusted capital expenditure** | **2.00** | **2.00** | **2.00** | **2.00** | **2.00** | **10.00** | **24.90** |

## 4.4 Summary of capital expenditure assessment

Overall, Central Highlands Water's PS5 submission provides a comprehensive breakdown of its forecast capital expenditure for the PS5 regulatory period. Our review of this submission, and the further supporting information provided and follow up discussions with Central Highlands Water, provide a reasonable level of confidence that most of the proposed capital expenditure program is consistent with the actions of a prudent business operating efficiently.

However, based on our review, we recommend adjustments to the forecast capital expenditure for major projects and programs to address uncertainties in the timing of growth drivers late in the PS5 regulatory period and to address current uncertainties in project and program scopes. Table 4.4 sets out each of the capital projects that we have recommended adjustments for.

After making these adjustments, our view is that the resulting forecast capital expenditure is justified, robust and capable of being delivered by Central Highlands Water in the PS5 regulatory period.

Table 4.4: Recommended adjustments to Central Highlands Water's benchmark allowance for capital expenditure ($ 1 January 2023, millions)

| Project/Program Description | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | Total PS5 Period | PS6 Period |
|---|---|---|---|---|---|---|---|
| **Ballarat Sewer Growth Project - Western & North-Western growth area** | | | | | | | |
| **Forecast capital expenditure** | 0.0 | 0.0 | 0.0 | 0.35 | 0.77 | 1.12 | 19.28 |
| **Recommended adjusted capital expenditure** | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 20.40 |
| **Ballarat Water Growth Project - Western & North-Western growth area** | | | | | | | |
| **Forecast capital expenditure** | 0.0 | 0.0 | 0.0 | 0.0 | 0.43 | 0.43 | 38.28 |
| **Recommended adjusted capital expenditure** | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 38.70 |
| **Growth & Development Upsizing & Efficiency Program** | | | | | | | |
| **Forecast capital expenditure** | 2.8 | 2.4 | 2.4 | 2.4 | 2.4 | 12.4 | 10.0 |
| **Recommended adjusted capital expenditure** | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 7.50 | 10.0 |
| **ICT Business Solutions Enhancements** | | | | | | | |
| **Forecast capital expenditure** | 3.13 | 3.00 | 2.63 | 3.26 | 2.87 | 14.90 | 20.0 |
| **Recommended adjusted capital expenditure** | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 10.00 | 24.9 |
| **Total adjustment:** | **-2.43** | **-1.90** | **-1.53** | **-2.51** | **-2.97** | **-11.35** | **+6.45** |

# APPENDIX A: CROSS-INDUSTRY OPERATING EXPENDITURE ISSUES

## Overview

There are several drivers of increased operating expenditure over the current PS4 regulatory period and/or forecast for the PS5 regulatory period that are common across water businesses. While the base-step-trend methodology does not involve a 'bottom up' or category-by-category assessment of expenditure, we consider it important to ensure that we have regard to the key drivers and trends in baseline increases and/or proposed step changes in assessing each business's proposal.

This appendix reviews some of those expenditure drivers in more detail, being:

- energy
- IT
- labour.

It also presents some comparative data submitted to the Commission by each of the water businesses as part of their respective Price Review Models. Section 3.2 of this report outlines the implications of this analysis for our approach.

## Energy expenditure

### Background

Energy costs have been increasing in recent years. This has been driven by several factors, including increases in the wholesale price of electricity, the impact of the Ukraine war on global energy prices, increasing network costs and the costs associated with the transition to renewable energy. This has impacted actual energy costs for the water businesses over the current PS4 regulatory period. The uncertainty and volatility in the electricity market has also made it more challenging for water businesses to forecast electricity costs for the PS5 regulatory period. The Victorian water businesses have also all committed to sourcing their energy requirements from 100 per cent renewable sources by 2025.

#### The Schneider report

The Intelligent Water Network is a collaboration between the Victorian water businesses, VicWater and DELWP (now DEECA). The Intelligent Water Network engaged Schneider Electric Energy and Sustainability Services (Schneider) to provide forecast electricity prices for the PS5 regulatory period.

Victorian Government Purchasing Board reforms have mandated use of the State Purchase Contracts for electricity (large and small market) managed by the Department of Treasury and Finance and Schneider. We understand that some water businesses are already using these contracts while others are in the process of transitioning to these new contracts.

The Schneider report, finalised in March 2022, addressed the following key assumptions:

- energy commodity rates (peak and off-peak)
- Large-scale Generation Certificates
- Small-scale Technology Certificates
- Victorian Energy Efficiency Certificates
- network forecast charges
- market operator charges.

It appears that all the water businesses have used the Schneider report as the basis for their forecast electricity costs for the PS5 regulatory period. We have undertaken a high level review of the Schneider report and the methodology and assumptions used (including data sources) appear reasonable. We have also examined how it has been applied by each business.

### Industry emissions reduction target

Under the Water for Victoria Plan, the Victorian water sector has committed to achieving net zero emissions by 2035. The sector has also committed to sourcing 100 per cent of its electricity needs from renewables by 2025. The Statement of Obligations (Emission Reduction) made pursuant to the *Water Industry Act 1994* requires all Victorian water businesses to:

- prioritise the implementation of actions that avoid or reduce emissions resulting from its operations
- achieve emission reductions efficiently, making full use of the time available to do so.[29]

In pursuing these reductions, Section 3.2 of the Statement of Obligations (Emission Reduction) encourages water businesses to:

- pursue actions and targets at the lowest possible cost, seeking to minimise any impact on water customer bills
- have regard to any price impacts on their vulnerable customers.

[29] Statement of Obligations (Emission Reduction), Section 3.1.

Five yearly targets have been set under the Statement of Obligations on the transition to net zero by 2035. This means that a business that has committed to achieving an annual emissions target in a target year (for example, by 1 July 2030) must ensure that it keeps its emissions at or below that level in all subsequent years leading up to their next five-yearly emissions target (for example, 1 July 2035). The requirement to source 100 per cent of their electricity from renewable sources applies from 2025 onwards.

Table A1 shows the baseline level of emissions for each water business and the reductions required by the 2024-25 financial year. It shows that the reductions required by each business vary materially depending on their current baseline.

Table A1: Victorian water businesses emission reduction targets

| Business | Emissions baseline | Annual reportable emissions 2024/25 (tonnes CO2 e) | % reduction from baseline |
|---|---|---|---|
| Barwon Water | 42,986 | 15,926 | -63 |
| Central Highlands Water | 18,351 | 14,738 | -19.6 |
| Coliban Water | 33,604 | 29,304 | -12.8 |
| East Gippsland Water | 8,272 | 6,496 | -21.5 |
| Gippsland Water | 42,021 | 32,080 | -23.7 |
| Goulburn Valley Water | 49,575 | 37,416 | -24.5 |
| Grampians Wimmera Mallee Water | 20,017 | 16,244 | -18.8 |
| Lower Murray Water | 44,188 | 24,708 | -44.1 |
| South East Water | 41,744 | 23,016 | -44.9 |
| South Gippsland Water | 7,663 | 6,480 | -15.4 |
| Southern Rural Water | 1,559 | 0 | |
| Wannon Water | 31,626 | 18,976 | -40 |
| Westernport Water | 6,062 | 5,598 | -7.7 |
| Yarra Valley Water | 32,004 | 11,664 | -63.6 |

Source: https://www.water.vic.gov.au/climate-change/reduced-emissions-in-the-water-sector/net-zero-emissions-by-2050

The businesses must then transition over the following five years to their next target (for the 2029-30 financial year). All businesses are required to achieve net zero by 2034-35, although some businesses are forecasting to achieve net zero by 2029-30.

It is evident from water businesses' PS5 submissions and discussions with them that different initiatives are being employed to achieve the 2025 target including one or more of the following:

- direct capital investment in 'behind the meter' renewable capacity (for example, installing solar photovoltaic (PV) at water treatment plants)
- purchasing energy generated from renewable sources (greenpower), which can involve an additional cost compared to conventional sources
- purchasing offsets, such as Large Generation Certificates.

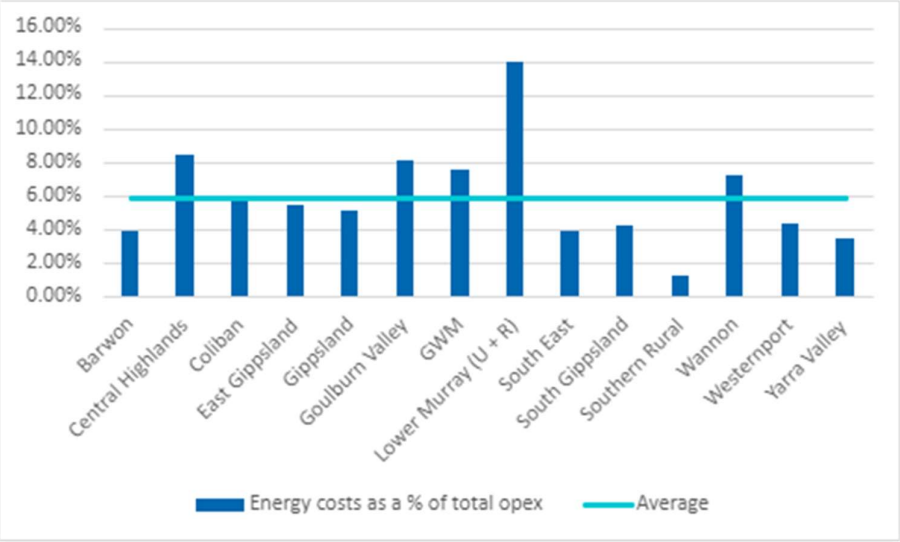
The most appropriate strategy depends on the needs and circumstances of the business, including the feasibility (and cost) of direct action measures such as solar PV.

Some businesses have proposed step changes in operating expenditure for additional costs associated with the above initiatives.

### Cross-sector expenditure trends

Overall, proposed electricity expenditure for the PS5 regulatory period accounts for a relatively small proportion of controllable operating expenditure, averaging around 6 per cent, as shown below.

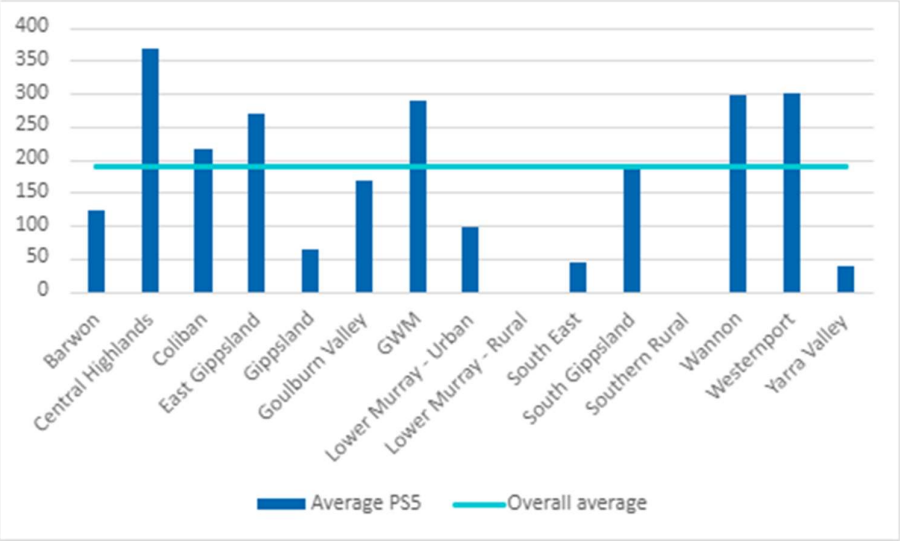
Figure A1: PS5 forecast total energy expenditure as a percentage of total controllable operating expenditure (%)




Source: Victorian water businesses, 2023 Price Review Models.

For the urban businesses, Figure A2 shows electricity expenditure per volume of water delivered (in ML).

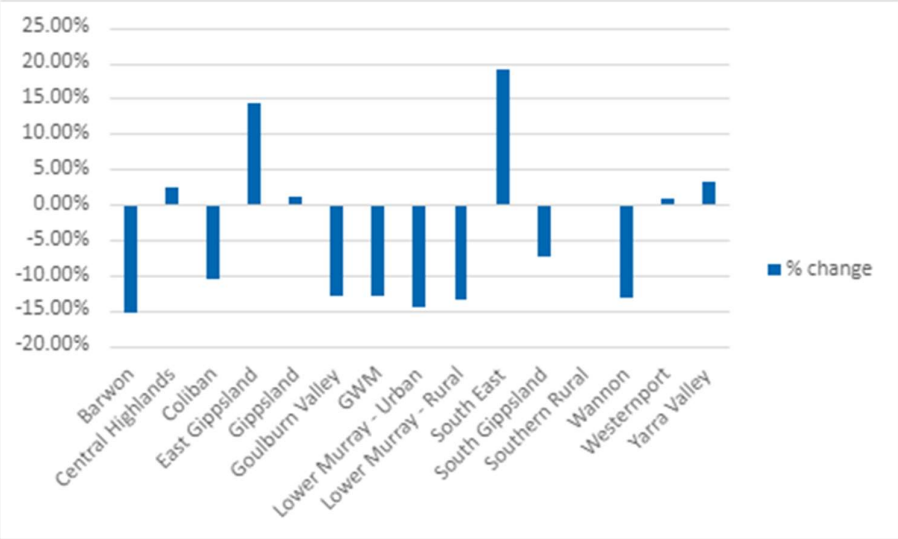
Figure A2: PS5 forecast energy costs per volume of water delivered ($ per ML, 1 January 2023)



Source: Victorian water businesses, 2023 Price Review Models.

As noted above, energy costs have been increasing over the current PS4 regulatory period. However, most businesses are forecasting a decline in energy costs in the PS5 regulatory period for several reasons, including efficiency initiatives and targets. Figure A3 shows the change between total actual PS4 energy expenditure[30] and proposed PS5 energy expenditure for each business.

Figure A3: Total energy expenditure: total proposed for PS5 regulatory period less total actual for PS4 regulatory period (%)




Source: Victorian water businesses, 2023 Price Review Models. Note PS4 actuals include an updated forecast for the 2022-23 financial year.

## IT expenditure

### Background

Several businesses have experienced increases in IT-related operating expenditure in the PS4 regulatory period, which have impacted the 2021-22 baseline, and/or are proposing step changes for IT expenditure in the PS5 regulatory period. This is reflected in three main categories:

- Cloud-based services

[30] Note that the water businesses' Price Review Models submitted to the Commission for this PS5 review include updated forecasts for financial year 2022-23.

- cyber security
- other IT expenditure.

### Cloud-based services

Consistent with trends in other businesses and industries, most of the water businesses are either in the process of transitioning, or have transitioned, to Cloud-based services (also referred to as Software as a Service (SaaS)). Rather than each business having all its own hardware and software infrastructure on-site, this is a software distribution model where key applications are centrally hosted via a third-party provider. Services are then delivered via the Cloud and the third-party provider manages all hardware and software requirements. Users then contract and pay for services based on a licence or subscription fee model.

Several water businesses source key applications from Technology One. In 2021 Technology One announced that it will commence transitioning all on-premises customers to its SaaS platform. Based on its timetable, it will cease providing on-premises support services to customers on 1 October 2024.[31]

A key implication of the change to this different service delivery model is that expenditure formerly categorised as capital expenditure will now be characterised as operating expenditure (i.e. relevant licence and subscription fees). Holding all else constant, this will be reflected in a reduction in capital expenditure and an uplift in operating expenditure (noting that this is not a 'dollar for dollar' substitution and that the profile for capital expenditure will have depended on the investment needs of the business). In terms of the impact on operating expenditure, this is evidenced by several businesses either attributing SaaS costs as a driver of the baseline uplift or proposing as a step change.

Additional costs may be incurred in the process of transitioning to Cloud-based services. In this regard, we understand that the Commission has advised the water businesses that it will consider capitalising transition-related expenditure where appropriate. Where proposed, this is considered as part of the review of each business's capital expenditure.

### Cyber security

The need to upgrade cyber security has accelerated over the PS4 regulatory period and is also now receiving increased scrutiny from government agencies, customers and the wider community. Activities range from ensuring that water assets and operations remain resilient to cyber attacks through to protecting customer data.

[31] https://technologyonecorp.com/saas/pathway-to-saas# {Accessed 13 December 2022}.

Victorian water businesses are required to comply with several requirements and standards including:

- the Victorian Protective Data Security Framework established pursuant to the *Privacy and Data Protection Act 2014,* which sets out mandatory standards for Victorian public sector agencies and bodies
- Victoria's Cyber Security Strategy 2021
- the Victorian Critical Infrastructure Resilience Framework, with water one of the eight critical infrastructure sectors. This has driven the requirement for a Water Sector Resilience Plan. Cyber security is one of several risks identified under that framework, which also extends to climate-related risks, pandemics and key supply chain disruptions. DEECA now leads the Water Sector Resilience Network, which aims to collaborate on matters relating to resilience by sharing information and experiences
- Implementation of the recommendations of the Victorian Auditor-General's Office's performance audit of Security of Water Infrastructure Control Systems.[32]

Cyber security initiatives can be expected to continue to develop and evolve over the PS5 regulatory period.

### Other IT-related expenditure

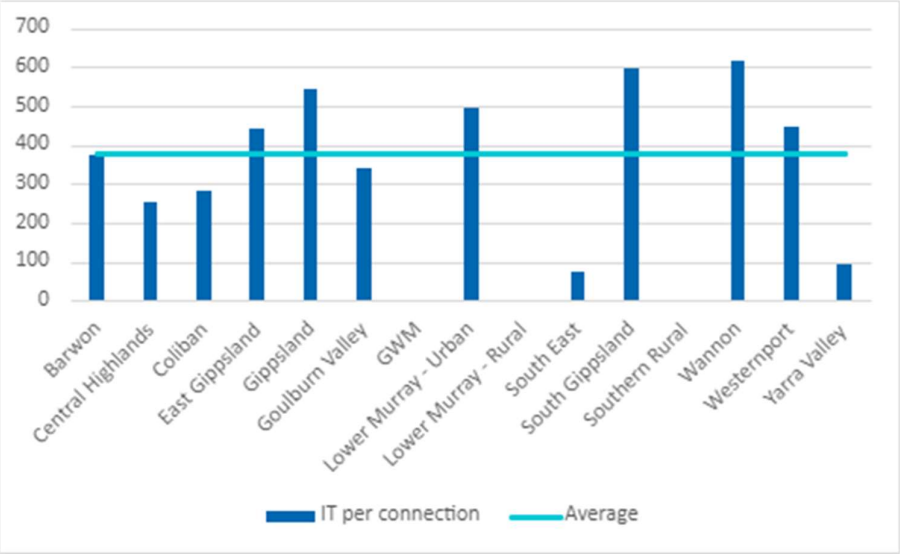
Depending on the functionality and maturity of each water business's current IT-architecture, other business-specific expenditure may be incurred in reviewing and upgrading this capability.

## Cross-sector expenditure trends

As part of the Commission's Price Review Model, water businesses are required to report on total IT expenditure. For urban networks, this includes metrics such as IT expenditure per average water connection. Figure A4 shows that most of the water businesses with a higher average expenditure per water connection are smaller organisations, suggesting the presence of economies of scale.

[32] Victorian Auditor-General's Office 2019, *Security of Water Infrastructure Control Systems*, 9 May.

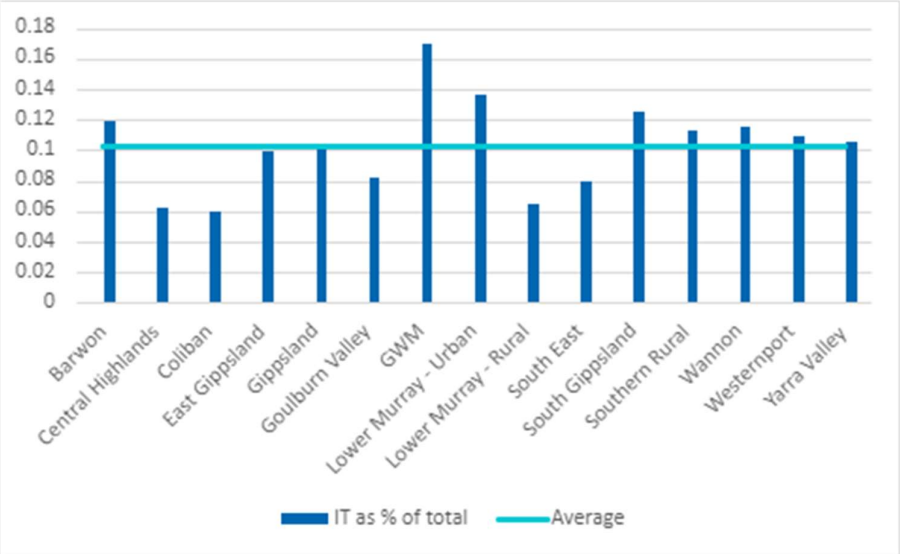
Figure A4: PS5 forecast: ICT operating expenditure per water connections ($ per average number of water connections, 1 January 2023)




Source: Victorian water businesses, 2023 Price Review Models.

Figure A5 shows total forecast PS5 IT operating expenditure as a percentage of total controllable operating expenditure. This includes the rural businesses.

Figure A5: PS5 forecast: ICT operating expenditure as a percentage of total controllable operating expenditure (%)




Source: Victorian water businesses, 2023 Price Review Models.

## Labour costs

### Background

Labour costs tend to account for the largest proportion of operating expenditure for the water businesses. On average across the businesses, labour costs account for just under 50 per cent of total forecast controllable operating expenditure for the PS5 regulatory period (see Figure A9 below).

Labour costs are a function of employee numbers (measured in terms of FTEs)[33] and the costs of remuneration (including salaries, wages and other employee-related expenses).

#### Labour force

The size of each organisation's labour force varies according to their business and operating environment, including their geographical location and service area (which, amongst other things, will influence the size and dispersion of field staff).

Some businesses supplement internal labour resources with external contractors – this can be a temporary response to labour shortages, a need for specialist expertise that does not

[33] Full-time equivalent employees.

reside in-house and/or decisions to outsource certain activities. The optimal balance between internal and external labour will be a management decision for the business.

### Remuneration

A key driver of remuneration is the water business's Enterprise Agreement (EA), which typically have four-year terms. Each water business is likely to have an EA expiring and a new EA commencing during the PS5 regulatory period. As a result, each water business needs to forecast the impact of any anticipated change in EA terms.

Some common themes have emerged in terms of labour costs over the PS4 regulatory period.

- First, Victorian public sector entities must ensure that executive remuneration complies with any determinations and guidelines issued by the Victorian Independent Remuneration Tribunal. They must also continue to comply with the requirements of the Public Entity Executive Remuneration Policy (PEER).[34] The Premier typically announces an annual adjustment guideline rate for adjustments to executive remuneration. For 2021-22 and 2022-23, that rate was 1.5 per cent. Several businesses refer to the application of this rate in their PS5 submissions.
- Second, several of the regional water businesses have commented on challenges in attracting and retaining staff. This appears to have become a more significant problem for some businesses as the labour market tightens following the economic recovery from the COVID-19 pandemic. Some businesses have cited the need to offer higher salaries (including above the EA rate) to attract and retain staff. This appears to have underpinned increases in baseline expenditure as well as step changes for the PS5 regulatory period. Changes have also occurred in terms of employee expectations and practices around flexible working.

These challenges appear to be consistent with overall labour market trends in recent years, as well as the outlook. This reflects a material shift relative to the subdued outlook for wages that prevailed at the time of the last price review, as summarised below.

### Labour market conditions and wage growth pressures

When the Commission made its determinations for the water businesses in 2018, Victoria had been experiencing a period of subdued wages growth, consistent with the experience

[34] Refer: https://vpsc.vic.gov.au/executive-employment/victorian-public-entity-executive-employment/public-entity-executive-handbook/4-remuneration/ {accessed 14 December 2022}.

of most other advanced economies.[35] The forecasts underpinning the 2018-19 State Budget was for wages to grow by 2.5 per cent in 2018-19 and 2.75 per cent in 2019-20.[36]

Actual growth in the Victorian Wage Price Index (WPI) was 2.6 per cent to 30 June 2019. It then contracted as COVID-19 impacted the economy, falling to 1.5 per cent for the year ended 30 June 2021 and then recovering to 2.3 per cent to 30 June 2022.[9] In terms of industry trends, for Australia, the annual change in total hourly rates of pay for the Electricity, Gas, Water and Waste Services sector was 2.9 per cent to 30 June 2022, compared to 3.2 per cent for all industries.

The most recent 2022-23 Victorian State Budget forecast was for an increase in the WPI of 2.75 per cent in 2022-23. It is then expected to increase further to 3.00 per cent per year to 2025-26 as the economy expands and labour market conditions remain tight.[37] The Reserve Bank of Australia (RBA) is forecasting stronger growth in the WPI for Australia, increasing to 3.7 per cent by 30 June 2023 and then rising to 3.9 per cent by December 2024.[38]

This presents a mixed picture of wages growth over the current PS4 regulatory period, which was significantly impacted by the COVID-19 pandemic. The current outlook is more bullish, driven largely by the tight labour market and high inflation, with spare labour market capacity at record lows.[39] In its November 2022 Statement on Monetary Policy, the RBA also observed that job mobility is higher than the years preceding the pandemic and is now around the levels observed prior to the Global Financial Crisis. It also noted the considerable uncertainty associated with the current economic outlook.

Overall, this highlights the current wage growth pressures that many of the water businesses has observed. The data doesn't enable any insights into the trends in regional labour markets in Victoria or specific pressures that might emerge for the skillsets required by the water businesses. However, the duration and extent of these wage growth pressures is also highly uncertain.

35 State of Victoria 2018, Strategy and Outlook 2018-19 Budget Paper No. 2, Department of Treasury and Finance, p.23.

36 State of Victoria 2018, Strategy and Outlook 2018-19 Budget Paper No. 2, Department of Treasury and Finance, p.22.

37 State of Victoria 2022, Strategy and Outlook 2022-23 Budget Paper No. 2, Department of Treasury and Finance, p.32.

38 Reserve Bank of Australia 2022, Statement on Monetary Policy, November.

39 Reserve Bank of Australia 2022, Statement on Monetary Policy, November.

### Superannuation Guarantee Charge

The compulsory Superannuation Guarantee Charge (SGC) has been progressively increasing to a rate of 12 per cent by 1 July 2025. This has been identified by some businesses as contributing to increases in labour costs.

The extent to which this will result in an increase in labour costs for employers depends on the nature of the employment arrangement. For example, for salaried workers whose salary package is inclusive of superannuation, the increase in the SGC may be offset by a reduction in take-home pay, which would result in no net change in costs to the employer. In other cases, where employees are on a 'salary plus superannuation' arrangement, it will result in an increase in total remuneration for the employee, which will increase the cost to the employer.

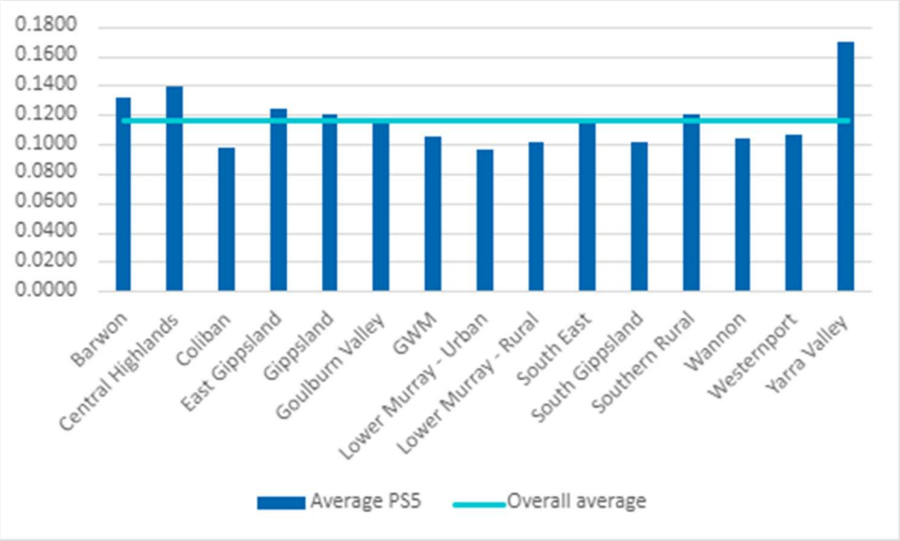
The impact of this will therefore vary between businesses and potentially within businesses given employees may be subject to different types of arrangements.

## Cross-sector expenditure trends

Businesses are required to report several metrics on labour costs in the Commission's Price Review Model, including FTEs and unit labour costs. Key metrics are summarised below.

Figure A6 shows average unit cost per FTE as forecast for the PS5 regulatory period, as reported by the businesses.

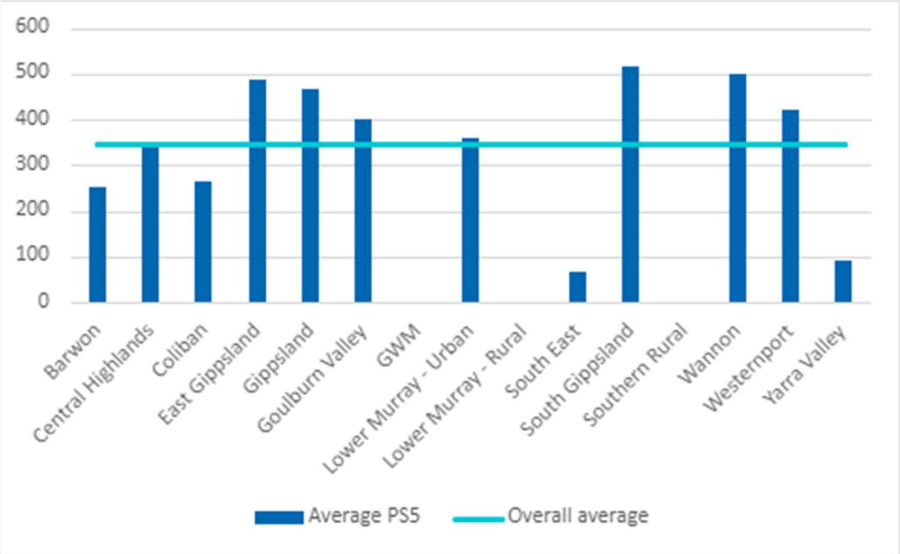
Figure A6: PS5 forecast average unit cost per FTE ($ million per FTE, 1 January 2023)




Source: Victorian water businesses, 2023 Price Review Models.

Based on forecast labour costs for the water businesses for the PS5 regulatory period, Figure A7 shows the average labour cost per water connection (based on the average of the forecast number of connections over the period). It shows that most of the water businesses with a higher average expenditure per water connection are smaller organisations, suggesting the presence of economies of scale.

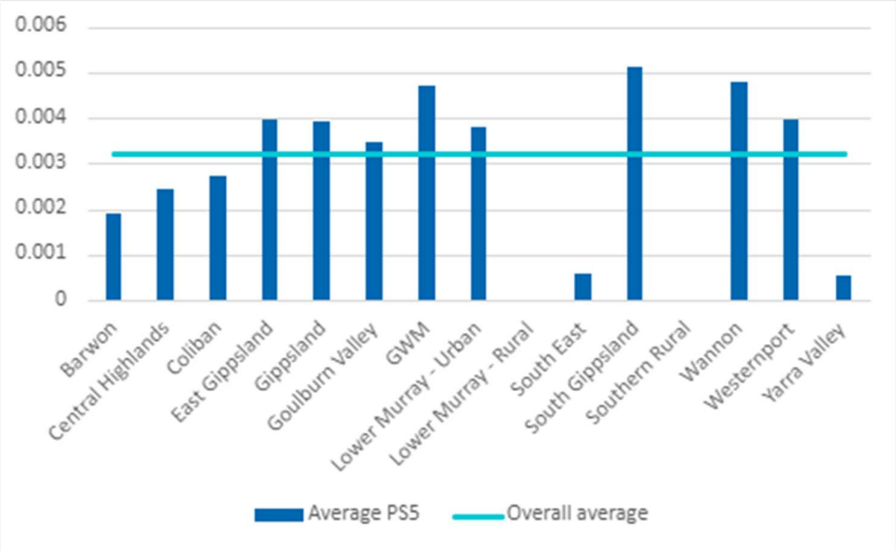
Figure A7: PS5 forecast: Average labour cost per water connection ($ per average number of water connections, 1 January 2023)




Source: Victorian water businesses, 2023 Price Review Models.

These scale economies are similarly evidenced based on the average number of FTEs per water connection (see Figure A8).

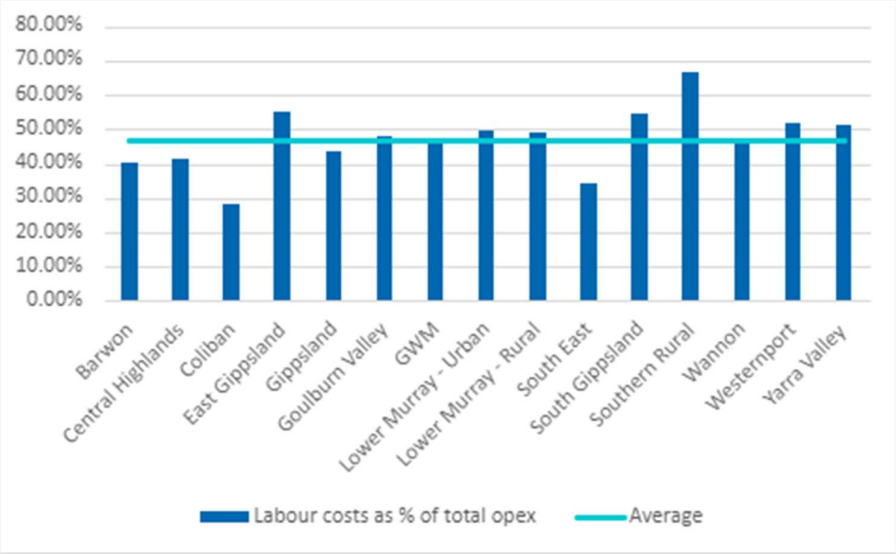
Figure A8: PS5 forecast average number of FTEs per water connection




Source: Victorian water businesses, 2023 Price Review Models.

Figure A9 shows forecast labour costs as a percentage of total controllable operating expenditure for each of the water businesses over the PS5 regulatory period.

Figure A9: PS5 forecast labour costs as a percentage of total controllable operating expenditure (%)




Source: Victorian water businesses, 2023 Price Review Models.

# APPENDIX B: LIST OF DOCUMENTS REVIEWED FOR ASSESSMENT OF CENTRAL HIGHLANDS WATER'S FORECAST CAPITAL EXPENDITURE

- Central Highlands Water – Project Justification Report, Ballarat West UGZ Southern Section (Cambrian Hill Growth Projects) (4 March 2022)
- Ballarat West UGZ Southern Section – Sewer, Estimate of Cost: Concept/Feasibility, Jacobs (July 2022)
- Central Highlands Water – Project Justification Report, Ballarat Sewer Build - Ballarat East Trunk Sewer (Stage 2) (4 March 2022)
- Ballarat East Trunk Sewer, Estimate of Cost: Concept/Feasibility, Jacobs (June 2022)
- Central Highlands Water – Project Justification Report, White Swan Dam Safety Upgrade (4 March 2022)
- White Swan Dam Safety Upgrade, Estimate of Cost: Concept/Feasibility, Jacobs (August 2022)
- Central Highlands Water – Project Justification Report, Northern GIA Growth Projects (4 March 2022)
- Northern GIA Water Trunk, Estimate of Cost: Concept/Feasibility, Jacobs (July 2022)
- Northern GIA - Sewer, Estimate of Cost: Concept/Feasibility, Jacobs (July 2022)
- Central Highlands Water – Project Justification Report, Ballarat South Outfall Sewer Main Duplication (May 2017)
- Central Highlands Water – Project Justification Report, WWTP – Regional Reuse Upgrades (4 March 2022)
- Regional Treatment Plant Irrigation Scheme – Ballan, Daylesford and Maryborough, Estimate of Cost: Concept/Feasibility, Jacobs (June 2022)
- Central Highlands Water – Project Justification Report, WWTP – Daylesford WTP Upgrade (4 March 2022)
- Daylesford Water Treatment Plant Masterplan – Stage 1, Estimate of Cost: Concept/Feasibility, Jacobs (May 2022)
- Central Highlands Water – Project Justification Report, Daylesford Water Supply Upgrade (May 2017)
- Central Highlands Water – Project Justification Report, Digital Metering and Monitoring Program (22 November 2022)
- Central Highlands Water – Project Justification Report, ICT and Digital Capital Program (23 November 2022)

- Central Highlands Water – Project Justification Report, Sewer and Water Network Upsizing and Efficiency Program (4 March 2022)
- Central Highlands Water – Project Justification Report, Water Supply Network Renewals Program (23/24 to 27/28) (4 March 2022)
- Central Highlands Water – Project Justification Report, Water Tanks and Basins major works Program (4 March 2022)
- Central Highlands Water – Project Justification Report, Sewer Gravity Main Renewals Program (4 March 2022)