

2024 Price Submission

28/09/2023

Acknowledgement of Country

The Greater Western Water region covers Bunurong, Wurundjeri Woi Wurrung, Wadawurrung, Djaara and Taungurung Country.

We respectfully acknowledge the Kulin Nations as the Traditional Owners of the lands and waters upon which we work, operate and rely. We acknowledge the continued cultural, social and spiritual connections that First Nations people have with Country.

We recognise and value that First Nations people have cared for and protected Country for thousands of generations. Country describes land, water, air, sky, people, animals and spirits to which First Nations people are connected.ⁱ

We are committed to working in partnership with local Traditional Owners and First Nations people, to harness collective wisdom to inform the future of the water management landscape while maintaining their cultural and spiritual connections to Country.



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All dollar values in this document are expressed in real terms and reflect \$2023-24 unless otherwise stated.

Price submission on a page



Lower bills for most customers this regulatory period

Compared to current bills, by 2024-25, in real terms, average household bills will:

In the **central region**:

- Decrease by \$11 for owner occupiers, and then increase slightly each year, ending up \$2 lower than current bills in 2027-28
- Decrease by \$20 for tenants and remain that price until 2027-28.

In the western region:

- Decrease by \$7 for owner-occupiers and continue decreasing, with 2027-28 bills \$47 lower than current bills
- Increase \$7 each year for tenants, with 2027-28 bills \$26 higher than current bills.

We're making the way we charge for water in the western region more like the central region, with lower fixed charges, and higher usage charges. This will increase western region tenant bills a small amount each year.



Customer outcomes



Your water is safe, consistent and resilient



When things go wrong, we fix them



We support our diverse communities and customers



We enable growth and help businesses thrive



We heal and care for Country

Improving services

To deliver on the customer outcomes, we will:

- Improve our impact on the environment
- Improve water quality and drought resilience

Maintain the current level of unplanned outages and response times

Improve our use and supply of alternative water Improve our communication and customer service for all customers

Improve our support programs for customers experiencing financial difficulty



Investment to deliver our customer outcomes

We are increasing our capital investment to reduce risk, improve compliance with regulatory obligations, and deliver on our customer outcomes.

Our capital program prioritises \$1.715 billion to invest in:

- New water and sewerage infrastructure to support growth
- · Water and sewage treatment
- Water main renewals
- Asset monitoring systems and information technologies

९९ What we heard from our customers and community:

- We heard from more than 8,000 people over 18 months through our six-stage engagement program.
- · We heard that affordability, equity of water services and playing a role in our community and the health of the environment are important.
- Our community is keen to support each other, and values our role helping people experiencing payment difficulty.
- · Our Traditional Owner partners would like dedicated resourcing to support meaningful engagement and water returns.

Performance through growth and integration

Integration brings challenges and opportunities.

As we integrate, we are:

- · Reducing our operating expenditure per connection from \$341 to \$310 over the regulatory period
- Making changes now to create long-term benefits for customers
- Delivering integration benefits and have saved customers in the western region \$12 million
- Meeting our customer outcomes and delivering most of our capital program

Message from our Chair and Managing Director

On behalf of Greater Western Water's Board, we are proud to present our 2024 Price Submission.

Greater Western Water was established on 1 July 2021, bringing together water corporations Western Water and City West Water to service one of Australia's fastest-growing regions. Our service region extends from Melbourne's central business district to the inner city and western suburbs through the Melton and Sunbury growth corridors to Bacchus Marsh and the Macedon Ranges.

Greater Western Water's first price submission sets a strong foundation to deliver trusted water services now and for future generations. Our price submission reflects our challenges and long-term ambitions, reflected in our *2030 Strategy* strategic pillars of Customers, Community and Country. Our customers have told us that these outcomes are meaningful and represent their values.

We engaged deeply with our customers to truly understand their expectations of their water corporation. Genuine and respectful engagement with the community we serve is very important to us, particularly our partnerships with Traditional Owners and First Nations people. The Greater Western Water Board and leadership were involved in each step of the engagement journey. On behalf of the Board, we were pleased to accept our price submission 2024 deliberative panel final report, providing clear direction where we need to balance investment to meet our customers' priorities, and consider the pressures of high inflation and cost-of-living challenges. While our customers' voices have shaped our submission, we take a long-term view to ensure we meet the needs of current and future customers.

Our prices will stay fair and as low as possible in the short term because we heard how important affordability is, and we are increasing resources to support anyone struggling to pay their bill. We are implementing better ways of working to deliver the full potential of the Western Water and City West Water integration and leverage the maximum value for our customers, including sustainable and efficient operating models and capital delivery processes that will better service the region's rapid growth. We also know that climate change impacts our customers and the resources we rely on, so we are implementing our first Climate Resilience Action Plan to guide our business. We have established considered and effective processes to continue delivering integration benefits to our customers, but we recognise that we are only part way there. Our first price submission sets out achievable outcomes with a clear eye to the future, supported by robust processes to track and report our performance to customers. The Board and leadership are accountable for delivering our customer outcomes and have committed to refreshing our *2030 Strategy* to align with these. These priorities will enable us to deliver customer commitments and stable bills over the regulatory period, while progressing towards our vision of 'Thriving people and Country'.

David A field

DAVID MIDDLETON Chair

MAP

MAREE LANG Managing Director

Board attestation

The directors of Greater Western Water having made such reasonable inquiries of management as we considered necessary (or having satisfied ourselves that we have no query), attest that, to the best of our knowledge, for the purpose of proposing prices for the Essential Services Commission's 2024 water price review:

- information and documentation provided in the price submission and relied upon to support Greater Western Water's price submission is reasonably based, complete and accurate in all material respects;
- financial and demand forecasts are Greater Western Water's best estimates, and supporting information is available to justify the assumptions and methodologies used; and
- the price submission satisfies the requirements of the 2024 water price review guidance paper issued by the Essential Services Commission in all material respects.

David A fieldet

DAVID MIDDLETON Chair

Executive summary

Greater Western Water (GWW) is Victoria's newest water corporation, formed by bringing together City West Water (CWW) and Western Water (WW). We serve a diverse and growing area, with our population expected to almost double over the next 30 years.

As a new corporation, the development of this price submission provided a unique opportunity to talk to and understand our customers, to incorporate their voices, and to develop new customer outcomes that reflect what they think is important.

GWW operates in Bunurong, Wurundjeri Woi Wurrung, Wadawurrung, Djaara and Taungurung Country. We respectfully acknowledge the Kulin Nations as the Traditional Owners of the lands and waters upon which we work, operate, and rely. Our commitment to partner with First Nations communities and Traditional Owner organisations across our service region is embedded in our *Innovate Reconciliation Action Plan* and *2030 Strategy*.

Engagement revealed that customer values and expectations of their water corporation have remained relatively the same since the previous regulatory period, but their priorities have changed, reflecting the challenging economic climate facing many households. We have balanced our customers' priorities against critical and strategic investments and expenditure to ensure our customers receive maximum value for money and only pay for what they will receive.

Our first price submission will improve the resilience and reliability across our water and sewage network, while ensuring affordability is a priority. Our customers will receive a 'similar price for similar service' with key improvements based on what our customers told us is the most important, including minimising our impact on the environment, improving water quality and drought resilience, improving our use of alternative water, improving customer experience, and always helping each other out by increasing our resources for people experiencing financial difficulty.

Declining and stable bills

GWW proposes a four-year regulatory period from 1 July 2024 to 30 June 2028, returning our regulatory period to alignment with our peers for the Essential Service Commission's next price review.

Our customers told us that affordability is one of their top priorities over the regulatory period given the current cost-of-living pressures. As GWW, we have delivered lower bills for our customers in the current regulatory period than otherwise would have occurred under the previous CWW and WW determination price paths. Our proposal delivers declining average bills in real terms over the next regulatory period (2024-25 to 2027-28). GWW's water bills for our 550,990 homeowners and tenants will remain some of the lowest water bills in the state.

Our proposed tariffs maintain central and western pricing zones in the areas previously serviced by CWW and WW, while we transition our tariff structures and prices into alignment over time. On average, across our entire service area, household bills will decrease by 1% or around \$11 at the beginning of the regulatory period, and then remain relatively stable over the period, before pass through adjustments and inflation.

Average owner occupier customers in the central region will see an initial bill decline of \$11 (-1.1%) in 2024-25 with bills increasing slightly each year to finish \$2 lower than current levels by the end of the regulatory period. Average tenant customer bills in the central region will reduce by \$20 (-3.9%) in 2024-25 and remain flat over the period.

In the western region, owner occupiers will see bill decreases each year of the regulatory period leaving bills \$47 lower than current levels (-4.3%) by the end of the regulatory period. Approximately 3% of our customers are tenants in the western region. These western region tenants will see a small bill increase of around \$6.50 per year, adding up to \$26 over the regulatory period in real terms. This increase occurs because we are changing the way we charge for water in the western region to be more like the central region, with lower fixed charges and higher usage charges. We are expanding our customer support programs to ensure that any customer needing support programs has access to the right services.

Customers told us that our bills should be simple and easy to understand. Central region customers will no longer be billed a residential sewage disposal charge and we will remove the Tier 3 water charges in the western region as these can penalise large households that are using water efficiently.

We are delivering savings by becoming a more efficient organisation. We will reduce our operating costs per connection with an average annual efficiency target of 3%. We will do this by improving the ways we work as we realise the benefits of integration and achieve efficiencies through economies of scale. Customers have not paid for any integration-related increases in operating expenditure that occurred between 2020-21 to 2023-24.

The table below shows indicative customer bill impacts for the next price period, before pass through adjustments and inflation.

Region	Customer segment	2023-24	2024-25	2025-26	2026-27	2027-28
Overall	Owner occupier	\$1,021	\$1,010	\$1,011	\$1,011	\$1,012
	% change		-1.0%	0.1%	0.1%	0.1%
	Tenant	\$504	\$487	\$488	\$489	\$490
	% change		-3.3%	0.2%	0.2%	0.2%
Central	Owner occupier	\$1,007	\$996	\$999	\$1,002	\$1,005
	% change		-1.1%	0.3%	0.3%	0.3%
	Tenant	\$531	\$511	\$511	\$511	\$511

Table 1 Proposed residential bills – 150 kilolitres per annum (\$, 2023-24), excluding pass through adjustments and inflation

Region	Customer segment	2023-24	2024-25	2025-26	2026-27	2027-28
	% change		-3.9%	0.0%	0.0%	0.0%
Western	Owner occupier	\$1,099	\$1,092	\$1,079	\$1,065	\$1,052
	% change		-0.7%	-1.2%	-1.2%	-1.3%
	Tenant	\$348	\$355	\$361	\$368	\$374
	% change		1.9%	1.8%	1.8%	1.8%

Our engagement journey

We conducted an ambitious, inclusive and accessible engagement program to understand our new customer base values and willingness to pay for services.

We heard from more than 8,000 people across our diverse service region through a sixstage engagement journey, over 18 months. Our program was grounded in exploratory engagement undertaken in 2021 and guided by our *2030 Strategy*. We used different engagement types, so findings were robust and fairly represent our customers. Each stage of the engagement informed the next, so we could learn and adapt.

We heard repeatedly that the increasing cost of living is impacting our customers. Given its importance, we built affordability into the price submission development. Affordability is a principle of our regulatory strategy and influenced our investment and expenditure programs. Our customers told us that everyone having access to the same quality and consistency of water is important and that they expect us to support the community and the health of the environment. These themes have shaped our price submission.

Our customers told us that managing unplanned disruptions to water services, sourcing water from less traditional ways, such as fit-for-purpose recycled water and stormwater, providing the same level of service for all customers, and supporting the health of waterways were the four most important topics to them. Our community deliberative panel, made up of 44 members, deliberated over five sessions on the four topics and chose to include a fifth topic for clear and accessible communication. The panel put forward 15 recommendations across the five topics and endorsed GWW's plans to action.

Customer outcomes

Our customer outcomes reflect what customers told us was most important, and the experiences define what the outcomes mean for customers every day. We set up a customer forum, which endorsed the final outcomes and selected the measures and targets most meaningful to them to track our performance. We added further measures and targets to those selected by our customer forum, to ensure greater accountability for our performance against our customer outcomes and core services.

Our customer outcomes are:

- your water is safe, consistent and resilient we deliver safe and consistent water supply that meets your expectations, regardless of where you live.
- when things go wrong, we fix them we minimise the impact of any disruptions and keep you informed while we do.
- we support our diverse communities and customers we help improve the liveability and wellbeing of our communities and support you if you're experiencing hardship.
- we enable growth and help businesses thrive we are a co-leader in development and growth in the region and support attracting sustainable and thriving industries.
- we heal and care for Country we improve the health of our catchments and waterways by limiting and reducing our impact on the environment for all users, including Traditional Owners.

Our customer forum will meet annually to track our performance and keep us accountable.

Investment delivering our customer outcomes

Our proposed capital program focuses on delivering customer outcomes, risk mitigation and improving infrastructure to bring together two water corporations with different functions, processes and asset management regimes to serve a rapidly growing region.

Capital expenditure of \$1.7 billion is proposed for the five years spanning 2023-24 to 2027-28. This considers what we have been able to deliver in the past and the improvements we're making to infrastructure planning and delivery. This investment will allow us to deliver our services to a standard that meets customer expectations.

The largest investments in infrastructure across our service area cover sewage treatment, water main renewals, and new water and sewer networks that support growth. We are investing in consolidating and improving asset monitoring systems and information technology to create long-term operational and capital efficiencies and improve customer service and communication.

Our capital expenditure program includes the top 10 major projects, large ongoing capital works programs and investments aligned to our customer outcomes.

Where we are investing





Your water is safe, consistent and resilient

- Renewing and replacing infrastructure to ensure supply and reduce outages and damage
- Installing new pipes connecting Macedon Ranges to Melbourne to prevent water restrictions
- Constructing a new tank to maintain water pressure in Sunbury and Melton during peak water use
- Upgrading dams to maintain safety requirements
- Upgrading Romsey water filtration plant to improve water quality and comply with Drinking Water Guidelines

When things go wrong, we fix them

- Building digital systems to monitor, record and report on the condition of our assets and improve our response and communication with customers
- Supporting highly capable asset lifecycle management and geospatial solutions
- Improving knowledge of the condition and performance of our assets to prevent service interruptions
- Reducing operational risks through stable, consistent and reliable infrastructure and asset monitoring



We support our diverse communities and customers

- Improving data security to protect customer and business privacy
- New billing system to support water industry standards and communicate with customers faster and more effectively through channels of their choice
- Improving business capability in managing, storing and processing data and automating processes

We enable growth and help businesses to thrive

- Increasing sewer and water network capacity to deliver services to a growing population
- Upgrading Melton recycled water plant to address growth and replace end-of-life assets



We heal and care for Country

- Upgrading treatment plants to improve recycled water quality at Woodend and Gisborne and support waterway health
- Increasing storage at Romsey recycled water plant to prevent spills and allow reuse at the right time
- Test the effectiveness of ultrafiltration package plant technology

Our commitment to Traditional Owners and First Nations people

Traditional Owners and First Nations voices are important to the 2024 price submission and beyond this regulatory period. The deliberative panel established to help develop this price submission made First Nations recruitment a priority and put measures in place to ensure cultural safety.

We acknowledge that our price submission timelines may not align with Traditional Owners' or be a priority and that partnership requires investment and time. We have developed a summary of what we've heard from Traditional Owners over time, that supports their desire and capacity to engage with us. We propose \$4 million operating expenditure over the next regulatory period to support Traditional Owners to lead selfdetermined capacity building projects and activities and to deliver on policy and partnership objectives to form genuine ongoing partnerships.

We are committed to working in partnership with Traditional Owners and will continue to engage in conversations in a way that best suits individual Traditional Owners' needs and interests. We will advocate for greater collaboration across the sector to streamline the many commitments put onto Traditional Owners and support a more holistic approach to delivering Traditional Owner aspirations for Country.

Continuing our support for customers experiencing vulnerability

Cost-of-living challenges continue to affect our customers' ability to pay their bills on time or at all. In some cases, without GWW providing a partial or complete waiver, customers would never get their account to a manageable position, let alone be debt free.

Our customers told us that supporting customers experiencing vulnerability is important and we need to make sure we continue to provide suitable services. We are proposing \$5.2 million in operating expenditure over the regulatory period for tailored services and proactive engagement with customers and to equip our people with the right skills to support our community.

To ensure our people have the skills to support our customers, we will continue providing training via specialist community organisations that engage with the people we support. This includes data protection and privacy training, as we understand the importance of privacy intersecting with vulnerability.

Performance through growth and integration

Effective integration is vital to deliver long-term benefits to our customers. It takes time and investment to meet this challenge and evolve an organisation. Our service region is experiencing high growth, cost-of-living pressures, ageing assets, increasing construction costs, climate change impacts and recovery post-COVID-19 pandemic. Within this uncertainty, we know that a clear vision and organisational capability are critical to integration success as we look to the future.

In the lead up to this price submission for GWW, we remain committed to the outcomes in the 2018 CWW and 2020 WW price submissions. We met most of our customer

outcomes and managed our capital program with reasonable justification for material cost variations. Our new customer base was satisfied with how we interacted with them and saw us as a trusted and reliable service provider. While high growth, the pandemic and integration drove higher spending than anticipated, our customers reported that we provide value for money (Essential Services Commission (ESC) perception survey).

We completed nearly half of our major capital works planned for 2018-19 to 2022-23, with the rest still within our plans to be completed. Some projects were delayed due to COVID-19, while others were re-prioritised following integration, making way for more pressing infrastructure projects. Integration meant that for some projects we could make more efficient decisions, which changed the scope for internal systems and assets. We also deferred or delayed some projects by sharing our assets and managing our combined network more efficiently.

Our total controllable operating expenditure across the 2018-19 to 2022–23 regulatory period was 7.9% higher than we anticipated in our CWW and WW price determinations. This expenditure enabled us to transform our business in areas such as safety, customer service, asset management, compliance, and corporate functions through a period of sustained growth and integration.

Looking ahead

Through all this change and progress, we have looked after our customers. Customers have paid no more than they would have with WW or CWW, and many customers have paid less. Most customers will continue to pay less again this regulatory period.

We are making changes now that will create long-term benefits for our customers. Our operating expenditure forecast includes a 3% annual average efficiency. This will be delivered through our sustainable efficiency program which will deliver efficiencies of 1.6% per annum on average, in addition to the 1.4% efficiency that we will achieve through economies of scale and scope. Our committed efficiency rate is above the ESC's efficiency hurdle rate and delivers an 0.19% average net efficiency over the regulatory period. This will reduce our controllable operational expenditure from \$341 to \$310 per connection over the regulatory period.

We have incorporated customer expectations for affordability, everyone having access to the same quality and consistency of water over the long-term and supporting the community and the health of the environment into our expenditure and investment programs. Our refreshed Guaranteed Service Level scheme balances risk fairly between GWW and our customers, increasing the number and value of payments available.

Our proposed spending aligns with our customers' priorities, minimises risk and is prudent and efficient. We are improving the ways we work and have a high efficiency target for the regulatory period, delivering the benefits of integration to our customers.

Our proposed PREMO rating

Our self-assessment for this price submission is a 'Standard' PREMO rating. A detailed assessment against each of the PREMO guidance questions is provided in Appendix A and a summary is provided below.

Table 2 Our proposed PREMO rating

PREMO element	Self-assessed rating	Rationale for rating
Performance	Standard	Meeting our previous CWW and WW price submission outcomes with increasing customer satisfaction and overall management of the capital program with reasonable justification for material cost variations.
Risk	Standard	Price controls to align tariffs across our full region and avoid and manage bill shocks. A prioritised and deliverable capital program, with risk appropriately shared between customers and the business.
Engagement	Advanced	Extensive and inclusive engagement program with our new customer base. Customers' priorities have influenced our expenditure and investment plans.
Management	Standard	Prudent and efficient investment and expenditure plans with an ambitious efficiency target. Decreasing and stable bills in real terms over the regulatory period, aligning with customer expectations for affordability. Ongoing engagement in place to hold us accountable to customers with full board and leadership support
Outcomes	Standard	Our customer outcomes, experiences and measures have been developed and endorsed by our customers, with clear, measurable and reportable targets.

1. GWW's first price submission

GWW is the first Victorian water corporation to be formed by bringing together a regional urban water corporation and a metropolitan water corporation. Without a roadmap to guide us, we have taken a considered approach to set up GWW with the capabilities and services required to serve a rapidly-growing region and deliver immediate and long-term benefits to our customers.

The ESC granted GWW a 12-month extension to submit our first price submission in September 2023, acknowledging that:

- integration created a significant impact on our business processes and unique circumstances for our pricing decisions
- an extension would give us more time to consider the impacts of integration and optimise to create long-term price certainty for customers
- GWW customers would benefit from an engagement program informed by a deeper understanding of the integrated organisation efficiencies that can better capture efficient costs.

The extra 12 months allowed GWW to delve deeper into the impacts and opportunities of integration, better align our services with the values of our new customer base, start delivering benefits to our customers, and better understand the required organisational and operational uplift to deliver on a new set of customer outcomes.

1.1 Who is Greater Western Water?

We are Victoria's newest water corporation and serve one of Australia's fastest-growing regions, with the population expected to almost double over the next 30 years.

We provide critical public health services through the provision of drinking water, sewerage services, recycled water and trade waste services to approximately 568,000 residential customers and more than 45,000 non-residential customers across an area of 3,700 square kilometres. Our service area stretches from Melbourne's CBD, inner and north-western suburbs through the Melton and Sunbury growth corridors to Bacchus Marsh and the Macedon Ranges.

Key statistics:

- \$3.7 billion infrastructure asset base
- 20 large dams
- 7 water filtration plants
- 10 recycled water plants
- 568,000 residential customers and 47,000 business customers
- 7,500 km of water mains
- 6,400 km of sewer mains
- 115,171 ML year of drinking water consumption
- 108,000 ML year of sewage managed
- 6,377 ML year of recycled water supplied

1.2 Our customers, community and partners

We seek to partner with all Traditional Owners and First Nations people across our service region, which is embedded in our Reconciliation Action Plan and *2030 Strategy*. We operate on the lands of five formally recognised Traditional Owners Groups: Bunurong Land Council Aboriginal Corporation, DJAARA (Dja Dja Wurrung Clans Aboriginal Corporation), Taungurung Land and Waters Council, Wadawurrung Traditional Owners Aboriginal Corporation and Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation. These groups all have interests and rights to water access and management.

We serve a diverse community. Our service region covers 11 local government areas and is home to schools, commerce and industry, agriculture, and small businesses. We service world-class sporting precincts, including the MCG, Marvel Stadium and Flemington Racecourse, and critical community infrastructure, including 21 hospitals and 10 university campuses.

Customers across our service region receive different service levels, water quality, security, and tariff and pricing structures depending on the legacy business that served them. This means our customers currently pay different prices and receive varying levels of service. **Figure 1** below shows our legacy business service areas, for the central and western region where differences in pricing and services occur.



Figure 1 Greater Western Water's service area (consisting of legacy City West Water and Western Water service areas)

1.3 Integrating two businesses into one

We have come a long way since the announcement of the integration of CWW and WW into GWW in late 2020. We have integrated our people systems, payroll systems, financial systems, policies and procedures, brand, signage and our organisational culture. We have developed our *2030 Strategy*, supported the community and delivered vital public health services through the COVID-19 pandemic, a triple La Nina event and floods, and we have now completed our first price submission. Even with all this progress, there are more improvements to be made before we seamlessly operate as a single business.

Our legacy operating models provided different services to our customers through vertically integrated (catchment to tap) and retailer-wholesaler business models. This means that we source, store, deliver and treat water differently across our service region. To continue to provide safe and affordable services across a rapidly-growing region, our systems and operations need to adapt to a new delivery model. We are still working through alignment of two very different business models with different functions and challenges, and there are more efficiencies to be realised as we progress and grow.

Leading up to integration, CWW had a relatively straight-forward asset base, but faced issues of stretching asset systems beyond their intended lifespan to ensure customer affordability. WW faced complexities arising from higher-than-forecast growth and financial constraints, resulting in demand for service exceeding asset capacity.

These differences in business models and asset systems meant immediately post integration, GWW had a diverse and complex infrastructure program without fit-forpurpose systems and processes and experienced operational incidents, water security challenges in parts of our service region and cases of non-compliance with EPA licence conditions.

To move forward as a truly integrated business, we need a strategic program that enhances our asset delivery maturity by addressing 'pain points' across the asset delivery lifecycle, supported by sound operational processes and capability.

1.4 Building the foundations of our long-term vision

Our 2030 Strategy outlines our purpose of delivering trusted water services for our communities and future generations. We are a key provider of public health services to the community, striving towards our vision of thriving people and Country.

We have put in place critical processes and systems to support our people and provide benefits to our customers. We launched our *2030 Strategy* (**Figure 2**), new risk management framework, culture ambition, and key policies for social procurement and compliance.



Figure 2 GWW 2030 Strategy Summary

We are investing in programs that will establish the foundational capabilities, processes and systems to deliver an increased capital program and sustainable efficiency program. The transformational programs include improving our asset delivery capability and developing a new customer experience platform for easier and more accessible communication.

The Asset Delivery Organisational Review (ADOR) is a key project that will change how we plan, design and build infrastructure. The full implementation of this \$10 million program and the associated systems and processes is planned for June 2024. ADOR will build GWW's capacity to deliver the infrastructure required to meet our obligations and deliver our customer outcomes. It will minimise the impact on the communities we as we plan and build infrastructure that is resilient under the pressures of growth and climate change. ADOR will also improve our ability to deliver broader social benefits aligned to government policy such as diversity and inclusion and working with Traditional Owners earlier in the asset planning and management lifecycle.

Case study: Asset Delivery Transformation Program (ADOR) – uplifting our asset delivery capability

ADOR is a multi-year program to transform our asset delivery capability and capacity, so we can continue to deliver fairly priced, high quality and reliable water and sewer services to our customers now and in the future. The program will improve the effectiveness and efficiency of our infrastructure capital delivery program.

In 2023-24, the key areas of uplift include:

- improving procurement, commercial and partnership approaches
- improving infrastructure planning and investment decision making
- building broader organisational resilience and capability
- establishing an infrastructure portfolio approach to drive greater efficiency, implement a single project management framework, better manage risk and improve performance measures and decision making

Figure 3 ADOR Case Study

 establishing 'one way of working', embedding consistent health, safety, environment and quality processes and practices across our asset delivery activities.

Water main renewal in inner suburbs of Melbourne



Throughout the period 2023-24 to 2027-28, we are making strategic investments and expenditure in core services that address our biggest risks and return value to our customers. Our capital expenditure will create efficiencies over the long term and aligns with what our customers have told us is important. We are using the skills and resources gained during integration to deliver a transformational program that will create sustainable efficiencies through this price period and into the next. Our sustainable efficiency program will reprioritise resources and streamline functions to reduce operating expenditure and deliver benefits to customers. Our major capital expenditure will deliver on our customer outcomes (outlined in Section 3) and create improvements with lasting benefits to customers. The next page shows how some of our infrastructure investments will support our customer outcomes.

Where are we investing?

LS.

Your water is safe, consistent and resilient

- Renewing and replacing infrastructure to ensure supply and reduce outages and damage
- Installing new pipes connecting Macedon Ranges
 to Melbourne to prevent water restrictions
- Constructing a new tank to maintain water pressure in Sunbury and Melton during peak water use
- Upgrading dams to maintain safety requirements
- Upgrading Romsey water filtration plant to improve water quality and comply with Drinking Water Guidelines



When things go wrong, we fix them

- Building digital systems to monitor, record and report on the condition of our assets and improve our response and communication with customers
- Supporting highly capable asset lifecycle management and geospatial solutions
- Improving knowledge of the condition and performance
 of our assets to prevent service interruptions
- Reducing operational risks through stable, consistent and reliable infrastructure and asset monitoring

We support our diverse communities and customers

- Improving data security to protect customer and business privacy
- New billing system to support water industry standards and communicate with customers faster and more effectively through channels of their choice
- Improving business capability in managing, storing and processing data and automating processes



We enable growth and help businesses to thrive

- Increasing sewer and water network capacity to deliver services to a growing population
- Upgrading Melton recycled water plant to address growth and replace end-of-life assets

XX XX XX

We heal and care for Country

- Upgrading treatment plants to improve recycled water quality at Woodend and Gisborne and support waterway health
- Increasing storage at Romsey recycled water plant to prevent spills and allow reuse at the right time
- Testing the effectiveness of ultrafiltration package
 plant technology

This section provides information supporting our Engagement PREMO self-assessment.

Summary

- We delivered a broad, extensive and inclusive engagement journey. We heard from 8,000 customers and stakeholders to truly understand our new customer base, with special consideration given to customers experiencing hardship and people whose voices are not always heard.
- Our first price submission has been shaped by our communities' voices and overall provided a 'collaboration' level engagement (IAP2 framework).
- We listened, learned and tested customer sentiment and willingness to pay which led to five endorsed customer outcomes for improved benefits to customers.
- We put decision-making power in the hands of a deliberative panel, which made 15 recommendations and accepted GWW's plans to action.
- Our PREMO self-assessed rating for Engagement is 'Advanced'.

GWW is committed to working with our customers and communities to provide water services that reflect their needs and values. This price submission has been shaped by what we have heard from our customers, communities and partners. Overall, we provided a 'collaboration' level engagement, as described in the IAP2 framework.

We designed the engagement to be accessible and inclusive. The ESC's 'Getting to Fair' strategy and guidance for 'Sensitive and appropriate engagement with consumers experiencing vulnerability' provided frameworks to support a set of values already held by our board and staff. We used the Commission for Gender Equality in the Public Sector's Gender Impact Assessment toolkit to ensure all engagement activities supported the voices of all customers.

We used our 2030 Strategy as a starting point, talking to customers about GWW's strategic outcomes of 'customers, communities and Country' as well as outcomes in the 2018 City West Water (CWW) and 2020 Western Water (WW) price submissions. Our customers responded positively to our 2030 Strategy outcomes, so we used them as the foundation for our engagement program. We have committed refreshing our 2030 Strategy to align with what we've heard through this customer engagement.

To ensure our submission accurately represents our customer base, we used inclusive techniques to explore, evaluate, compare, and confirm the value that we provide to our customers. Special consideration was given to customers experiencing hardship and people whose voices are not always heard. Community and industry representatives were involved in each stage of our engagement, and we adjusted and improved the program based on their advice.

We heard that the increasing cost of living is impacting on our customers. In response we have embedded affordability in the development of this price submission. Affordability was a principle of our capital expenditure prioritisation and influenced our regulatory strategy of maintaining stable bills. We also heard that everyone having

access to the same quality and consistency of water is important and that our customers expect us to support the community and the health of the environment. These themes have shaped our proposal.

At each stage of our engagement, we reflected customer voices into our work and refined our submission. The decisions made by our deliberative panel were incorporated into our capital and operating programs and customer outcomes to the maximum extent possible.

We will be accountable to our customers by reporting our performance against our customer outcomes directly to our customer forum, through a scorecard (Appendix C). This performance stewardship will ensure our customers can see how we are delivering against what we promised.

2.1 Engagement journey

We used a six-stage engagement approach: early engagement, activation, exploration, valuation, deliberation and confirmation. The findings of each stage were used to design the next. The program facilitated knowledge sharing between customers and GWW, with customers providing clear direction on what they expect from GWW over the next regulatory period.

Our engagement identified four key topics that our customers and community saw as complex and important. We used a deliberative panel process. The panel developed recommendations, taking into consideration the qualitative and quantitative findings of earlier engagement stages. The panel chose to provide recommendations on a fifth topic: clear and accessible communication.

Our engagement journey

We started with:

Our 2030 Strategy and strategic outcomes:

- Delivering value for our customers
- Supporting communities to thrive
- Healing and caring for Country

We were guided by:

- Our Community Engagement Framework
- ESC's Getting to Fair strategy
- ESC's Sensitive and appropriate engagement guidance

Early engagement

Understanding how to engage with customers and exploring principles and prices.

5 tariff reform focus groups 3 stakeholder interviews

6 community focus groups

78 people engaged

Activation Aug – Sept 2022

Working within GWW to identify challenges and set engagement scope, structure and purpose.

Internal workshopping

Exploration Oct - Dec 2022

Testing our strategic outcomes – customers, community, Country – with customers and understanding what's most important to them.

10 participants in our stakeholder survey and interviews

Community survey 8 focus groups

Face-to-face engagement in regional communities

3,299 people engaged

Confirmation

June – Aug 2023

Endorsing customer outcomes, selecting performance measures and closing the loop.

Customer forum Customer survey Face-to-face community engagement 1,333 people engaged Refining customer outcomes and changing our plans based on panel recommendations.

Deliberation

March - June 2023

Deliberative panel 44 people engaged \$

Valuation Dec 2022 – March 2023

Testing our customers' willingness to pay for their identified priorities.

Best-worst survey Bill simulator survey 8 focus groups Customer advisory group **3,294 people engaged**

We achieved:

- New customer outcomes, experiences and measures
- 15 community panel recommendations
- Tariff structures reflecting customer views
- Price submission 2024-28

Who we engaged with:

Partners and stakeholders

- Traditional Owners
- Community support organisations
- Industry and community experts
- State and local government
- Development industry

Customers and communities

- First Nations peoples
- Customers experiencing financial hardship
- Customers living with a disability
- Customers from diverse cultural backgrounds

- Young people and international students
- Retirees
- Renters and homeowners
- Small businesses
- Trade waste and industry customers
- Not for profit community groups

2.2 Pre-price submission engagement

The price submission engagement program was influenced by pre-existing customer engagement activities including:

- 2030 Strategy engagement
- community engagement framework
- regular customer satisfaction surveys.

2.2.1 Early engagement

Engagement focus

Our initial engagement community focus groups (June 2021) ensured our engagement approach was appropriate and accessible for all customers. Following the focus groups, we ran a joint tariff reform engagement program (October-December 2021) with South East Water and Yarra Valley Water.

How we engaged

Community focus groups (28 participants)

Who we heard from	Residential and business customers, young people, culturally and linguistically diverse people, retirees, industrial and agricultural customers
Purpose	Identify customer preferences for communication and engagement

Joint tariff reform focus groups and stakeholder interviews (44 focus group

participants, six interviewees)

Who we heard from	Financially vulnerable customers, politically progressive – high and low income, politically conservative – high and low income
Purpose	Determine customer tariff design preferences for fixed vs variable tariffs, inclining step tariffs, the sewage disposal charge and the water meter charge.

How customer feedback influenced our price submission

The community focus group findings were used to improve our engagement program design by:

- changing the way we planned to deliver surveys by offering the opportunity to win a water bill credit (for example 'win \$50 off your next water bill')
- paying all focus groups, deliberative panel and customer forum participants for their time
- being transparent with communication materials and purpose
- allowing enough time for recruiting participants (at least two weeks)
- attending established events, such as farmers markets and charity events, to engage with our community.

We used the findings from the joint tariff reform focus groups to develop our 2024 proposed tariff structures (see Section 66).

2.3 Price submission engagement

2.3.1 Activation

Engagement focus

The **Activation** stage (August – October 2022) focused on engaging within GWW. We identified challenges where we needed customers' direction and decisions. We established the scope of our engagement, asking: 'How can we leverage the voices of our customers to achieve a balance of investment in the future while maintaining an affordable service for our customers?'. We decided to use our *2030 Strategy* strategic outcomes to help structure our conversations with customers.

This work identified some of our largest potential spend areas and biggest challenges that customers could influence, including:

- reliability how quickly we should align service levels across the region and how we should manage unplanned interruptions
- the balance between affordability and system reliability
- how we achieve net zero emissions
- how we go about healing and caring for Country
- how we support our customers particularly those who experience hardship
- what digitisation of services customers would value
- what opportunities customers would like GWW to investigate to improve climate resilience through alternative water use
- the ways we deliver against our compliance obligations
- level of investment in integrated water management solutions
- how we support environmental (waterway) health.

We also built on our understanding of the wider community context by reviewing 3,200 customer responses to other industry surveys and research papers.ⁱⁱ

2.3.2 Exploration

Engagement focus

The **Exploration** stage (October – December 2022) tested our *2030 Strategy* outcomes of customers, communities and Country. It also tested which of our key challenges from the activation stage were most important to our customers.

How we engaged

Community survey and focus groups (3,097 survey response, 69 focus group attendees)

To ensure accessibility, customers could call a hotline where the survey could be translated into their preferred language – with more than 300 languages provided by this service.

	culturally and linguistically diverse customers, customers who identify as living with a disability
Purpose	To test if the 2030 Strategy still resonated with our customers (including the three outcomes of customers, communities and Country) and to understand what challenges customers prioritise <i>outside</i> of affordability.

Stakeholder survey and interviews (10 stakeholders)

Who we heard from	Trade waste customers, education services, water industry experts, disability services and government
Purpose	To understand the interests, concerns and priorities of our non-residential stakeholders.

Pop up events (123 community attendees)

Who we heard from	Macedon Ranges community members – price submission was part of a larger engagement program for this region to discuss specific region-relevant topics
Purpose	Opportunity for face-to-face engagement with a community that had limited take- up of our online activities via well attended community events.

What our customers told us

Residential and non-residential customers told us that our *2030 Strategy* strategic outcomes of customers, communities and Country are meaningful and capture their values and interests.

Affordability of our services was emphasised during this stage. As affordability was such a strong message from our customers, we used it as a lens over the entire program, rather than specifically asking questions about it.

Our stakeholders told us that 'delivering reliable services even in the face of climate change and a rapidly growing population' was important to delivering value to customers.

Residential and non-residential customers identified six priority topics from the exploration phase that are as important to them as affordability. These six topics are described below and referred to throughout this submission. After this point, we will only refer to them as their header:

• **Unplanned disruptions**: An unplanned disruption is when your service doesn't work. When you turn the taps on, nothing comes out or when you empty the sink or flush the toilet the water doesn't go away. These are different to planned disruptions where customers are notified in advance.

- **Harmonising service levels**: GWW customers receive water and sewerage services through local and centralised assets, which vary depending on where you live. This means that not everyone gets the same quality and reliability of water supply. This is referred to as different service levels.
- **Getting water from other sources:** With a growing population and changing climate affecting how much water comes into water storages each year, the water industry is looking at alterative water solutions. Getting water from other sources through this engagement meant increasing our use of fit-for-purpose recycled water and treated stormwater for a variety of purposes.
- **Supporting waterway health**: GWW is not directly responsible for waterway health but how we store, use and discharge water can have an impact on waterway health. Supporting waterway health for this engagement meant investment to improve the quality of water we discharge, increase capacity in our network to minimise possible sewerage spills and working with local partners.
- **Reaching net zero:** GWW is committed to reaching net zero emissions by 2030 but how we get there can be influenced by customers. This can include investment in trees to support biodiversity and renewable energy installations to support the local economy.
- **Supporting customers experiencing hardship:** It is a business priority to ensure all customers can access our services and, legally, we are required to provide support for customers experiencing hardship. We currently provide customers a higher service than the government requires.

How customer feedback influenced our price submission

Customer feedback confirmed that using our *2030 Strategy* strategic outcomes as a basis for the price submission engagement and the development of customer outcomes reflected customer sentiment. The six priority areas identified by customers progressed through to the valuation stage.

2.3.3 Valuation

Engagement focus

The **Valuation stage** (December 2022 - March 2023) explored our customers' willingness to pay for the six priority topics identified in the exploration stage through surveys and focus groups. Tailored focus group recruitment ensured that our diverse customer base was represented.

How we engaged

To test our customers' willingness to pay for their priorities, we used two surveys: a bill simulator and a best-worst survey.

Through early engagement, customers told us that transparency is important. To meet customer expectations and be true to our engagement framework, we clearly stated on both surveys that we are aiming to maintain stable bills. The bill simulator warned customers if their choices would mean a price increase. It was then up to the respondent to decide if they were comfortable with a price increase.

To ensure accessibility, both surveys were written in plain English. Our best-worst survey was more inclusive; it required a lower cognitive load and less digital literacy.

We also translated the best-worst survey into the three most spoken languages in the region other than English (Mandarin, Arabic and Vietnamese).

We recognise the limitations of quantitative surveys, like the willingness to pay surveys, so we did not make decisions based on these surveys alone. The surveys allowed us to understand customer priorities. They also helped our deliberative panel understand the different segments of our community that they would need to consider when making decisions.

• **Bill simulator survey and focus groups** (2,177 survey responses and 68 focus groups attendees)

The bill simulator allowed respondents to see in 'real time' the bill impacts of their decisions on different cohorts (including large and small households who rent and own, concession card holders and small businesses).

• **Best-worst survey** (949 survey responses)

Respondents were asked similar questions to the bill simulator, testing the same priority topics. They were provided with specific options for addressing a problem and were asked to choose the 'best' and 'worst' option.

Who we heard from	Renters, homeowners, small businesses, customers who identified as experiencing payment difficulties, young customers and international students, retirees, culturally and linguistically diverse customers, customers who identify as living with a disability
Purpose	For our customers and communities to put a financial value on the areas identified as important to them in the previous engagement activities.

What our customers told us

Our customers and community told us how much they are willing to pay for the six priority topics.

Unplanned disruptions

On average, customers supported a \$25.88 million revenue requirement increase over the regulatory period.

Customers said they would be comfortable paying slightly more for fewer unplanned disruptions.

Harmonising service levels

On average, customers supported \$15 million revenue requirement increase over the regulatory period to address this issue.

There was no community consensus on this topic through the willingness to pay surveys and focus groups. In the best-worst survey, almost a quarter of customers told us to 'do nothing', with the rest split between different improvement measures. However, only 10% of bill simulator survey responses chose the 'do nothing' option.

The overall responses from the bill simulator survey indicated a recommended increase in spend.

Getting water from other sources

On average, customers supported an increase of \$13.14 million revenue requirement increase over the regulatory period to address this issue.

Using alternative water was well supported through our willingness to pay surveys. Most customers wanted us to use alternative water, but not invest in alternative water projects to keep bills as low as possible. However, customers were split between the ways alternative water should be used.

Supporting waterway health

On average, customers supported an increase of \$25.14 million revenue requirement increase over the regulatory period to address this issue.

Customer feedback varied. During our previous engagement stages, customers said GWW supporting healthy waterways was a priority. However, our best-worst survey had mixed results – with most customers saying that spending is needed, but findings were split about the way customers wanted us to address the problem.

Reaching net zero

On average, customers supported an increase of \$2.09 million revenue requirement over the regulatory period to address this issue.

Customers clearly indicated through the best-worst survey that they supported us investing in energy efficient operations. The bill simulator found that local investment in renewable energy was preferred over purchasing offsets.

Supporting customers experiencing hardship

Through the best-worst survey, customers wanted GWW to maintain or increase the current spend for customers experiencing hardship. Their preference was by direct bill relief. These findings were reflected in the bill simulator, with the vast majority of customers (85%) expecting us to continue or increase our support for customers experiencing hardship.ⁱⁱⁱ

Our engagement findings to date were provided to our Customer Advisory Group (outlined in Section 2.3.2). The group stressed the need to ensure accessibility and that all voices – especially those who are often drowned out by the majority – had the opportunity to influence the submission.

How customer feedback influenced our price submission

Based on the engagement findings, four priority topics were taken to the deliberative stage:

- unplanned disruptions
- harmonising service levels
- getting water from other sources
- supporting waterway health.

The four priority topics and suggested revenue requirements were shared with internal subject matter experts, executives and our board. Proposed projects and estimated costs to deliver them were identified across the business in preparation for the deliberation stage. This would ensure our panel had the right information to make informed decisions.

The willingness to pay findings were incorporated into our customer outcomes. The areas with the highest spend were assumed to be priorities and helped to refine our customer outcomes.

Reaching net zero and supporting customers experiencing hardship had such consistent feedback that further investigation through the deliberative stage was not necessary.

Based on strong customer feedback, we have proposed \$5.2 million increased operating expenditure over the regulatory period to increase customer support programs and individualised services for residential and small business customers experiencing hardship. Our programs include engaging directly with our customers and training our people to ensure they have the skills to support our community. This includes all customer experience staff completing data protection process and privacy training.

Reaching net zero emissions by 2030 is a business priority. Customer feedback influenced it to become an outcome target (outlined in Section 3.1.5). GWW continues to investigate how to best meet net zero by 2030, including considering local solutions.

2.3.4 Deliberation

Engagement focus

We chose not to use quantitative feedback to justify bill changes in isolation. We brought the four most divisive or highest spend priority areas from the valuation stage into our **Deliberation stage** (March – June 2023). A panel of 44 customers dissected, challenged and recommended a course of action that they considered best for our entire community.

How we engaged

Deliberative community panel (44 panellists – see engagement summary report for panel demographics)

Who we heard from	44 panel members who were chosen based on the demographics that best represented the population of our service region: location, homeowner/renter, age, gender, level of education, residential or small business customer. First Nations recruitment was made a priority.
Purpose	We did not make decisions on our price submission through quantitative analysis alone. The deliberative panel was intended to provide detailed, informed recommendations that directly led into the development of our outcomes and capital program.

Our deliberative panel met over five full days to investigate and deliberate over the four priority topics. The panel was provided with the cost to deliver different outcomes for each topic area, shown as the revenue requirement over the period. They were also provided with a 'ready reckoner' (supporting document) to convert the revenue requirement into an estimated bill impact for different types of water users. Together these gave the panel a clear indication of the financial impact their decisions would have on bills. The panel was focused on affordability and actively prioritised spending across their recommendations.

The panel invited GWW and external subject matter experts to panel meetings on topics of their choice to better understand the areas and help make informed decisions.

To ensure the accessibility of our panel, we provided:

- interpreters and translated documents for panel members who did not speak English
- all documents written in plain English
- face-to-face engagement for participants not digitally literate and therefore unable to participate in online events
- resources in physical form for those who could not access them online
- laptops and internet access for participants who did not have their own
- extra compensation to participants with caring duties.

We also sought advice from the GWW Senior First Nations Advisor to ensure additional measures were put in place for cultural safety.

What our customers told us

The panel provided specific actions for each of the four priority topics and chose to include a fifth topic for timely and accessible communication.

Our panel put forward 15 recommendations and four recommended spend ranges in their final report, which they presented to the GWW Chair and Managing Director at the close of the panel (supporting documentation).

As with earlier engagement findings, affordability was front-of-mind for participants. This was evident in the panel's chosen spend for each topic and in their discussions around service levels. However, the panel still recommended an increase in spend to deliver their priorities. The panel strongly agreed that everyone in our service region should have access to the same level of service but understood the high-cost implications and that it would take many regulatory periods to achieve. They recommended addressing the highest risk areas first to keep costs down.

Some of our panel members agreed to take part in a short video answering questions on their role in the panel and feedback, which can be viewed on GWW's website: <u>https://youtu.be/edWeHqZhFP4</u>.

Unplanned disruptions

Ensuring prices remained affordable was a key factor for discussion. The panel agreed that unplanned disruptions should not happen but were comfortable with keeping the current level of disruptions to keep costs down and instead focus on proactive management and clear and accessible communication. To maintain the same level of service, the panel suggested an increased revenue requirement of up to \$15 million over the regulatory period, with the spend to focus on improving communication.

Timely and accessible communication

We heard that transparent and accessible communication is important and was included as a fifth topic as it connects to all priority topics, particularly unplanned disruptions. The panel told us that providing proactive communication in the ways our customers want to receive it is a priority and recommended a revenue requirement of \$15 million split between unplanned disruptions and communications.

Harmonising service levels

The panel told us that drought resilience across our service region is important, and that everyone should have access to high-quality and reliable water sources. In particular, the panel wanted us to prioritise harmonising service levels between urban and regional customers. Considering the large cost impact this could have on bills, the panel suggested that we focus on addressing the highest risk locations first. To deliver this, the panel suggested a revenue requirement of \$10 million over the regulatory period.

Getting water from other sources

The panel wanted GWW to increase funding for up to 15 new stormwater harvesting schemes, and increase our advocacy role in alternative water to support waterway health and green open spaces to save drinking water. The panel's reasoning for this was the 'changes in climate, population growth and decreased rainfall to help meet the ever-growing demand'.^{iv} The panel also stressed that engaging with local councils, businesses and other water corporations is critical. A revenue requirement of \$10-\$14 million was suggested.

Supporting waterway health

The panel acknowledged that GWW has limited responsibility in supporting waterway health. However, following their investigation into the topic and hearing from experts in the field, the panel agreed with the wider community sentiment that supporting waterway health is a key priority. The panel supported spending on improving the quality of water discharged to waterways, increasing treatment plant capacity to minimise the risk of spills, collaboration with councils and other water corporations, and improving community education. The panel recommended a revenue requirement of \$11-\$25 million.

How customer feedback influenced our price submission

The panel's recommendations directly influenced our investment and expenditure programs.

For each priority area we have outlined the panel's suggested revenue requirement spend range and our plans to action (**Table 3**). The revenue requirement was developed based on early project cost estimates, some of which have since changed. We have used the panel's suggested spend range as an indicator of their priorities.

Our investment and expenditure planning processes ran in parallel (outlined in Section 4). Feedback from the panel and broader community actively influenced our plans in real time, while balancing affordability. The panel endorsed our plans on their recall day, with 88% of panel members strongly supporting.^v the way GWW planned to address their recommendations..^{vi}

The panel's feedback also directly informed our customer outcomes and corresponding measures.

Table 3 Responding to our panel recommendations (\$, 2023-24)

Торіс	What we heard	What we are doing to respond
Unplanned disruptions Proposed revenue requirement \$0-15 million *Suggested spending focused on communications of unplanned disruptions.	 The panel recommended the focus for unplanned disruptions be maintaining current disruption levels and improving communication. Continue programs to prevent unplanned disruptions at the same level and anticipate issues before the projected failure time Update how we report against unplanned disruptions (include percentile). Improve our communications about planned and unplanned disruptions. 	Monitoring Program of Works (\$37m). Allowing for real time monitoring and control of physical infrastructure.
Improving communication with customers Proposed revenue requirement \$0-15 million *Suggested spending focused on communications of disruptions and remaining to unlift	 The panel asked that we 'notify and communicate with customers in a more proactive and customised way' to ensure accessibility. Improve and increase communication with customers across all areas of our business (especially unplanned and planned disruptions). Appropriate and accessible communication methods. 	 access a self-service online portal. Implement systems that detect, track and report on disruptions: Enterprise asset and works capability uplift (\$18m) Geospatial capability uplift (\$16m) SCADA technology consolidation (\$9m)
remaining to uplift unplanned disruptions.		 Digital communication with customers via our website and social media is being prioritised. These programs will provide better customer experience through communication and support proactive and rapid communication with our customers when things go wrong.

 These recommendations have informed the development of outcome 2.
Engagement

Торіс	What we heard	What we are doing to respond	
Harmonising service levels Proposed revenue requirement \$7-\$10 million	 The panel's recommendations centred around an overall improvement in services, especially in the outer areas of our service region. Same level of drought resilience for everyone. Same access to water quality for everyone. Good long-term infrastructure plans in place. Consider hiring apprentices and using GWW staff instead of contractors to deliver services. Increase investment to harmonise service levels across the service region, addressing the highest risks first. 	 Deliver three major projects with a combined capital expenditure of \$121m to improve water security and capacity in high-risk areas: Macedon Ranges Transfer Augmentation (\$56m) Holden Tank WPS and Transfer Main (\$36m) Bald Hill Tank construction (\$29m) Align our capital plan and ongoing business planning for the next 10 years with the panel's recommendations to harmonise service levels across the service region addressing the highest risk locations first. These programs progress towards equitable access to water and sewerage services across our service region in the long-term. They improve service levels for key areas, reducing the risk of water restrictions and water quality issues. These recommendations have informed the development of outcome 1. 	
Getting water from other sources (alternative water) Proposed revenue requirement \$10- \$14 million	 We heard from the panel that their focus on alternative water was on increasing the number of schemes and collaborate with key groups in our community. Partner with local councils to deliver alternative water projects. Increase investment and access to alternative water use. A combination of household level investments and bigger projects. Invest in best practice and new technologies. 	 Through a partnership model, stormwater harvesting schemes (\$13m) will deliver non potable water for irrigation of public open space. The program will include a competitive, merit-based funding model which will ensure funded stormwater harvesting projects can provide the greatest liveability and environmental benefits at the lowest cost to the community. Collaboration with our Integrated Water Management (IWM) forums and work towards IWM action plans. Providing reimbursements for developers who connect residential customers to recycled water. Programs listed above will improve liveability, social and environmental outcomes for customers in local council areas by reducing our reliance on catchment water and using 	

Engagement

Торіс	What we heard	What we are doing to respond
		stormwater to irrigate public open spaces.This recommendation has informed the development of outcome 3.
Supporting waterway health Proposed revenue requirement \$11- \$25 million	 Waterway health was very important to our panel, and feedback indicated they wanted us to focus on education, collaboration and upgrades to our assets. Ensure we comply with regulations around waterway health. We should invest in upgrading our sewage treatment plants to improve the quality of recycled water released to waterways. We should invest in stormwater harvesting and prioritise local sources where it is cheaper. We should invest in the sewerage network to prevent spills to waterways. Work with Government and community to reduce the use of drinking water for non-drinking purposes. 	 Five treatment plant upgrades to increase capacity and treatment levels to support waterway health (\$140m). Treatment plant upgrades will significantly improve the quality of recycled water at Woodend and Gisborne and support waterway health downstream. Additional storage at Romsey recycled water plant to prevent spills and allow reuse. An ultrafiltration package plant trial at Romsey to test new affordable, high-quality treatment technology that could be rolled out across the region. The programs listed above will provide customer benefits by improving the quality of water discharged to local waterways and reducing sewer spills supporting waterway health, improved liveability and environmental outcomes. This recommendation has informed the development of

2.3.5 Confirmation

Engagement focus

Our final stage, **Confirmation** (May – September 2023), focused on endorsing our customer outcomes and customers becoming stewards of our performance. This was done through a customer forum and community engagement to close the loop with our customers and community. Customers were given the opportunity to respond to the five customer outcomes and our responses to the deliberative panel's 15 recommendations. This stage provided assurance that our customers' values and interests are evident in our plans.

How we engaged

Customer forum (22 members)

Who we	15 members of the deliberative panel to provide continuity and seven new members who
heard	registered their interest
from	

Purpose To provide GWW with an accountability process in which to present our performance against customer priorities and to whom we are accountable. Meeting annually for the regulatory period, the forum will review our performance against our customer promises and measures.

The forum was asked to:

- confirm that the draft customer outcomes accurately reflect their values and expectations
- choose what outputs best represent each outcome
- advise how each output should be measured
- consider which measures should have a GSL attached to them, and the GSL amount.

Confirmation survey and face-to-face engagement (1,046 survey responses and 262 attendees)

Who we heard from	Our survey heard from renters, homeowners, business customers and customers who identified as experiencing hardship. Face-to-face events focused on communities in five local government areas chosen based on proportionally lower engagement responses.
Purpose	To close the loop with our communities, reflecting back what we heard through broad engagement and the deliberative panel to ensure we are accurately representing their priorities in our submission.
	Our survey gave customers the opportunity to comment on the panel's recommendations and GWW's response. Face-to-face engagement focused on our customer outcomes.

Stakeholder interviews (three interviewees)

Who we heard from	Representatives from: trade waste customer, regional small business and disability support organisation
Purpose	To close the loop with the stakeholders we spoke with in exploration to ensure we are accurately reflecting their priorities in our submission.

What our customers told us

Our deliberative panel members showed strong support for our five customer outcomes and our plans to deliver on their recommendations.

Our customer forum strongly supported the outcomes we proposed for our 2024 price submission. We heard that customers could see how our engagement phases have influenced the customer outcomes and that they reflect customer priorities. The forum

Engagement

chose the key measures for each of our customer outcomes, and a connected GSL (if appropriate).

Survey feedback indicated strong support for our plans to action the panel's recommendations, receiving at least 90% support from customers completing the survey. Comments indicated that customers wanted the focus to be first and foremost on affordability.

Community attending face-to-face events broadly supported our customer outcomes, with no customer saying they did not agree with them. However, some customers raised concerns that affordability was not expressly stated in any outcome. All customers in these events supported the idea of 'stable bills'.

How customer feedback influenced our price submission

The feedback from our customer forum helped us develop our `customer scorecard' (Appendix C). Our customer forum will meet annually to review our performance against the scorecard. The scorecard will be made publicly available to hold us accountable.

Feedback from our confirmation phase provided us with confidence that our plans aligned with what customers expect of us and value. The focus customers had on affordability further supported our decision to have it as an overarching theme of our submission and a principle of maintaining stable bills.

2.4 Parallel stakeholder and partner engagement

Running alongside our engagement with our customers and communities, we engaged directly with our stakeholders and partners. We understand that delivering valued services needs to be in collaboration and we wanted to ensure that broader industry and community interests were reflected in our submission.

2.4.1 Engaging with our Traditional Owner partners

'I am particularly gladdened to see healing and caring for Country and I hope that this will be done in collaboration with First Nations communities.' – feedback from focus group participant

GWW is committed to working with Traditional Owners and First Nations peoples. This extends beyond our price submission and the regulatory period.

In March 2023, GWW sent a letter to each of the five formally recognised Traditional Owner groups within the GWW service region advising them of the price submission process. The letter offered briefings on the process and anything of interest to Traditional Owners and included areas that Traditional Owners may wish to influence the price submission and beyond. A follow-up email was sent in April.

Ongoing quarterly meetings with each Traditional Owner group were initiated in early 2023. These forums provided an opportunity to discuss the development of the price submission if of interest to Traditional Owners. We were able to meet with some Traditional Owners, some directed us to other key documentation that articulates priorities and interests, and some chose not to participate. This feedback will support any future engagement with Traditional Owners. GWW thanks all Traditional Owners for their consideration of this work.

Engagement

We re-affirmed our commitments to Traditional Owners through a 'what we have heard' briefing note (supporting document). The document was shared with all five formally recognised Traditional Owner groups and demonstrated:

- how we are embedding our existing commitments to Traditional Owners in our 2024 price submission
- our intent to grow our partnerships with them through delivering our price submission commitments and developing future price submissions
- how we will use existing documents where Traditional Owners have articulated their priorities and interests to inform how we partner with and support them.

We recognise that developing relationships, enabling self-determination, and supporting water access and management takes time and investment. We propose a \$4 million operational expenditure increase over the regulatory period for Traditional Owners to lead projects and activities to support knowledge building and deliver on policy and partnership objectives.

Outside of the dedicated Traditional Owner expenditure, as we plan to deliver our customer outcomes, we seek to work with Traditional Owners where there is interest to influence. This could include, but is not limited to:

- how we use alternative water to manage climate change impacts and population growth to preserve drinking water
- how we can improve waterway health and preferences on what we should be focusing on (stressed waterways, specific locations, native flora and fauna)
- how we achieve net zero carbon emissions (planting trees, local renewable energy solutions for the region).

It could also include adapting our annual business planning priorities to better align with Traditional Owner interests and collaborating with the water industry to jointly support outcomes.

GWW acknowledges that our price submission timelines may not align with Traditional Owners or simply may not be of interest or a priority. We are committed to working in partnership with Traditional Owners, and we will continue to engage in conversations in a way that best suits individual Traditional Owners' needs and interests. This includes GWW advocating for greater collaboration across the sector to streamline the many commitments put onto Traditional Owners and supporting a more holistic approach to delivering Traditional Owner aspirations for Country.

2.4.2 Advice from trusted partners

Customer advisory group (three industry experts)

Our Customer Advisory Group met four times through the latter half of our engagement program to provide insight and advice to improve our program.

Their advice influenced our deliberative panel and our customer forum, particularly in the outcome measures and guaranteed service levels.

Who we	Three community experts with knowledge of the utilities industry, our service region and
heard	consumer hardship. Representatives were from Consumer Action Law Centre, Melton City
from	Council, and Carbon and Energy Markets.

Purpose Three industry and region experts to act as 'critical friends' for our price submission engagement to provide with feedback and challenge the engagement process.

The advisory group provided our board with a letter of support for the engagement program following their final meeting (Appendix D).

2.4.3 Hearing from the development industry

The west is growing rapidly. To meet the needs of our current and future customers, we engaged with the development industry to understand their expectations and to provide an avenue for direct feedback on price submission related inputs.

Our development industry forum met three times, to discuss ongoing engagement preferences, interests and concerns relating to existing New Customer Contribution (NCC) charges and proposed NCC charges for the regulatory period. We also discussed transition pathways, opportunities to review Network Service Plans and how we can represent the development industry in our customer outcomes, measures, and targets.

Representatives from the Urban Development Institute of Australia (UDIA), the Association of Land Development Engineers and Property Council Australia attended and were asked to share all materials and seek members' feedback to make sure our findings fairly represented the industry.

Feedback received during the forums was supportive of our proposed NCC structure and approach to transition standard and greenfield charge levels over time to be more cost reflective, appropriately balancing price shocks. The forum was also supportive of the simplified GWW standard change and proposed return of our standard NCC charge to a level consistent with the standard charges (non-growth area) of Yarra Valley Water and South East Water.

The development industry's support for our NCC charges and transition pathways has informed our final NCC position (outlined in Section 6.3). A formal letter of support was provided by UDIA (supporting document).

Development industry feedback was directly incorporated into our fourth customer outcome 'we enable growth and help businesses thrive', defining one of the experiences and three measures.

We are committed to ongoing engagement with the development industry. This will involve further consultation with industry representatives following the ESC review of the NCC framework.

2.4.4 Hearing from local councils

Our service area includes 11 local council areas. We are committed to ongoing relationships with our councils, having partnered with them to deliver several projects in the previous regulatory period.

To ensure councils could engage with us in the way that suited them, we provided opportunities for feedback throughout out price submission development:

- stakeholder survey and interviews (November 2022)
- ongoing conversations with our Integrated Water Management (IWM) team

Engagement

• direct engagement between our Managing Director and council CEOs (letters and follow up communication in July-August 2023).

We received feedback from eight local councils (Brimbank City Council, City of Hobsons Bay, Hume City Council, Macedon Ranges Shire Council, Maribyrnong City Council, Melbourne City Council, Wyndham City Council and Yarra City Council). Brimbank and Maribyrnong Councils provided letters of support (see supporting documentation), other councils provided written support via email.

We heard that councils were supportive of our customer outcomes, with some noting that they aligned with the council's plans and strategies. They were strongly supportive of our plans to deliver the deliberative panel's 15 recommendations. Councils were particularly supportive of the 10 additional stormwater harvesting schemes and the strong alignment to our third customer outcome 'we support our diverse communities and customers', by improving the liveability of our service region.

2.5 Ongoing accountability and customer stewardship

Our engagement program will continue post-submission providing ongoing accountability and communication with our customers. Consistent and meaningful engagement on performance will be delivered through our customer forum.

Our customer forum will meet annually to review our performance measures against our targets and assign the ESC's 'red, amber or green' rating against each of our customer outcomes. Through this process we will regularly check in with our customers to understand whether our outcomes, experiences and measures are still fit for purpose or if they require updating to better reflect their original intention or changing community priorities.

The findings of our engagement are embedded into the everyday work of GWW. We will update our *2030 Strategy* to reflect the priorities we've heard from our customers and communities.

The engagement for our 2024 price submission has established ongoing partnerships with our community. These partnerships will provide opportunities for more in-depth engagement for our future submissions and will ensure we are delivering the services that matter to our customers.

Supporting documents for engagement:

- Traditional Owner 'what we heard' briefing note
- Public engagement summary report
- Focus group feedback report Melbourne Water tariff review
- GWW Strategic Engagement Plan
- Universal and inclusive engagement checklist
- Exploration stage report
- Valuation stage report
- Deliberative panel 'Ready Reckoner' document

Engagement

- Deliberative panel report
- Deliberative panel process report
- Deliberative panel recall day report
- Customer forum summary report
- Confirmation stage report
- Letters of support from Brimbank City Council and Maribyrnong City Council
- Letter of support from UDIA

Our customer commitments for the next four years reflect what customers told us through our engagement program. This section outlines how we gathered and used customer feedback to develop our five new customer outcomes.

This section provides information supporting our Outcome PREMO self-assessment.

Summary

- Leveraging our GWW 2030 Strategy, we listened, learned and tested our new customer base values to understand what matters most and what they expect of their water provider.
- Five new customer-endorsed outcomes.
- Our customer forum chose measures that were most meaningful to them. We will report against these annually to keep us accountable to customers.
- We analysed and combined legacy business targets to develop suitable targets for GWW and to maximise the benefits to customers.
- Our PREMO self-assessed rating for Outcomes is 'Standard'.

3.1 Our customer outcomes



Our customer outcomes are described with customer experiences. For example, our first customer outcome 'Your water is safe, consistent and resilient' will be experienced as high quality and safe drinking water, uninterrupted supply of water and uninterrupted sewerage services.

For each experience, there are one or more quantitative measures that we will report on to our customers, the ESC and our customer forum each year. The customer forum voted these as the most meaningful measures to keep us accountable. Where there are many aspects of an experience, we have added additional measures to support accountability to our customers.

We developed our customer outcomes through the price submission engagement program, outlined in Section 22. We began with the outcomes from previous price determinations and our *2030 Strategy* and used data from Water Services Association of Australia (WSAA)'s 2021 customer perceptions benchmarking study relevant to our service region.

Each stage of our engagement program provided different types of information, which we used to build the outcomes, the experiences, and the measures we will use to track our performance.

The exploration phase established values and initial priorities, the valuation and deliberation phases helped sharpen our experiences and develop measures and targets, and the confirmation stage endorsed outcomes and selected the best measures. Where the information differed at different stages, we relied on majority findings.

A comparison of our new customer outcomes against our existing outcomes for WW and CWW are listed in Section 3.

Overwhelming support for our customer outcomes

When we tested these customer outcomes with our customer forum and told them how we arrived at them, 95% were confident that they represented customer priorities.^{vii} During face-to-face engagement with customers, 100% of respondents supported the outcomes, feeling they were both what they expected from GWW and represented what they valued.

How we will be accountable

We will be transparent and accountable when reporting our performance over the regulatory period. We will continue to outline our performance in our annual outcomes report to the ESC and our update report (released in February each year). Assessment of our performance will be against the 'red, amber, green' criteria outlined by the ESC.

We will also report directly to our customers through our ongoing customer forum. This forum is designed to keep us accountable to the evolving needs and priorities of our customers.

3.1.1 Customer outcome 1 - Your water is safe, consistent and resilient

Our customers told us that providing safe and high-quality drinking water at all times was a top priority. Our customers will experience this outcome as:

- Water that tastes great, is high quality and always safe to drink.
- Water that is there when they turn on the tap.
- Their sewerage service works without interruptions or blockages.

What we heard from our customers

We heard that customers valued safe and high-quality drinking water, and consistency of supply, and are prepared to pay more to support improvements. Our deliberative panel wrote recommendations supporting this outcome. They were happy with the current level of service for unplanned outages and did not recommend spending more to reduce their frequency.

Exploration stage

In the exploration stage customer survey, customers told us that they value:

- everyone in the service region having the same great tasting water (55% or respondents)
- everyone in the service region having the same level of water security, where no one is more at risk of water restrictions (47% of respondents)
- everyone paying the same amount for water, regardless of where they live (54% of respondents)

Customers strongly supported our *2030 Strategy* outcomes 'delivering value to customers' and 72% of respondents and most of our stakeholder respondents identified delivering reliable services, even in the face of climate change and a rapidly growing population, as important. Findings were consistently reflected in the exploration stage focus groups, with 29% of comments relating to high-quality water and system reliability – the highest priority after affordability.

Valuation stage

Through the bill simulator survey and focus groups, we tested three investment options to deliver various levels of quality and reliability of water supply to all customers. We found that survey respondents' willingness to pay was a mix of the most expensive option to fix issues as soon as feasible, and spending more than current levels to address the highest risk areas. This was also evident across focus group participants, including financially vulnerable customers, who were also willing to pay more to prioritise fixing the problems as soon as feasible. Focus group participants chose the highest option driven by equity concerns and were willing to pay a bit more to ensure all customers regardless of where they live received a similar level of service.

Deliberation stage

We took this priority topic to our deliberative panel, which made several recommendations, including:

• Improving infrastructure to support drought resilience across our network by investing in improving network interconnectivity to move water through GWW's

network to areas that require the water in times of drought and more substantial local storage facilities. (Recommendation 2.1)

- Ensuring the highest standard of water quality, taste and smell for everyone regardless of geographic location. (Recommendation 2.2)
- Developing a short-term and long-term plan for upgrading infrastructure and by first addressing the highest risk areas whilst keeping the current level of service with some improvements. (Recommendation 2.3)
- Prioritising the delivery and maintenance of harmonised pricing and service levels between regional-urban and urban areas. (Recommendation 2.5)

We incorporated these recommendations in our customer outcomes and experiences.

How we will be accountable to our customers

We will report against four measures that underpin our three customer experiences. These measures were voted for by our customer forum.

We will report on:

- compliance with Australian Drinking Water Guidelines and Safe Drinking Water standards to demonstrate that our water tastes great, is high quality and always safe to drink.
- customer satisfaction with the quality of water they receive.
- the number of customers receiving a high-level of unplanned interruptions to water supply and sewerage services.

Our targets are based on average performance over 2020-23 and across regional and urban areas.

Table 4 Customer outcome 1 – Your water is safe, consistent and resilient

Your water is safe, consistent and resilient

We want to ensure that everyone in the region has the same level of water security. That means services that work without interruption, and that the water is great-tasting, safe and of high quality. We want to ensure that our services are consistent and resilient to population and climate change.

Experiences	Report card measures	Our 2024-28 target	Commitments delivering benefits to customers
Your water tastes great, is high quality and always safe to drink	Compliance with water quality standards and regulations (Safe Drinking Water Regulations and Australian Drinking Water Guidelines)*	100%	 Continue to provide safe, clean drinking water supported by water quality monitoring and alerts with our bulk water providers. Deliver and implement our drinking water quality roadmap to improve water quality, which considers the different operating models across our service region. Continue to complete audits (HAACCP system and compliance and regulatory audits) in accordance with the Safe Drinking Water Act. Upgrade and consolidate digital systems that monitor, record and report on the condition of our assets and enable interaction with our
	Customer satisfaction on our water quality on those who contacted GWW in past 12 months*	>85%	 report on the condition of our assets and enable interaction with our billing and communications system to enable better customer experience. Continue our water testing and disinfection program and report on drinking water quality to our customers. Continue to plan to optimise drought resilience across our service region to improve resilience Implement SWS/GWMUSS actions to ensure we have consistent supply of water into the future for all customers.
Water is there when you turn on the tap	Number of customers receiving more than 4 unplanned water supply interruptions in a year*	<270 customers	 Continue proactive maintenance and network renewal programs to ensure that water supply is consistent and resilient and interruptions to services remain the same Continue to prioritise planned and responsive works for high-risk
Your sewerage service works without interruptions or blockages	Number of residential sewer supply customer interruptions	<3,100 customers	 sites, such as hospitals and high-density areas, such as Melbourne's CBD to minimise customer impacts. Invest in network improvements to ensure supply is more resilient and consistent at the highest-risk locations and to increase treatment

	(excludes interruptions due to faults in customers' pipes)*	 plant capacity to reduce the risk of spills and improve quality of outflows. Implement and review our asset management plans to ensure they are targeting areas at greatest risk of interruptions. Asset Delivery Organisation Review (ADOR) to support delivery of infrastructure to meet customer outcomes, minimise community impacts, and ensure resilience to growth and climate change challenges. 			
Major commitments contributing towards this outcome					

Safe drinking water in Romsey (\$27.83m CAPEX)

Water supply reliability for Sunbury (\$29.04m CAPEX)

Water Main Performance Renewals Program (\$197.66m CAPEX)

Water Treatment Growth and Renewals (\$54.56 CAPEX)

*These report card measures were chosen and agreed by our Customer Forum. Our investment and expenditure forecasts consider our customer outcomes and are aligned to ensure measures are achievable.

3.1.2 Customer outcome 2 – When things go wrong, we fix them

As outlined in customer outcome 1, customers expect everyone in the region paying the same amount for water services to have equal levels of service.

We acknowledge that total system reliability comes at a very high cost to customers, that disruptions to our services can happen and that customers are prepared to have some disruptions to keep services affordable.

Customer outcomes 1 and 2 balance the spending on system reliability and the level of responsiveness when things go wrong.

Our customers will experience this outcome as:

- When things go wrong, we are responsive and efficient.
- When you contact us, we provide excellent customer services.

What we heard from our customers

During the exploration, valuation and deliberation stages, customers told us that they value resolving faults and issues in a timely manner. In the valuation stage we heard that customers were willing to pay a mix of the current level and more to support improvements in high-risk areas. Our deliberative panel wrote a range of recommendations supporting this outcome, but also indicated they were satisfied with the current level of interruptions and did not wish to spend additional money on significant improvements. However, they were willing to pay for better communication around outages.

Exploration stage

In the exploration stage customer survey, customers and stakeholders strongly supported our 'delivering value to customers' strategic outcome and its focus areas from our *2030 Strategy* and rated the following as important:

- improving water services to reduce the impact of faults and issues (56% of survey respondents and stakeholders)
- having excellent customer service with fast response times (44% of survey respondents and 33% of stakeholders) rating.

We also heard from our stakeholder interviews that accessibility was important to them.

These findings were consistent with the exploration stage focus groups, where 21% of responses related to reliability and responsiveness.

Valuation stage

In the valuation stage, we explored the balance between reliability and responsiveness but did not specifically discuss providing excellent customer service, as there was only limited interest shown in the exploration phase. However, the deliberative panel showed considerable interest in customer service through their conversations and recommendations, and recommended improvement in communication with customers.

In a comprehensive bill simulator survey and focus groups, we tested four options relating to lower and higher levels of reliability and responsiveness, with different associated costs. We found a strong willingness to pay, with more than 60% of respondents willing to spend much more to improve reliability and responsiveness. Less

than 5% of respondents selected the option to reduce bills by having more interruptions.

These findings were repeated in focus groups, including financially vulnerable customers. Five focus groups chose the option to keep the current level of investment, expenditure and level of service, and three focus groups chose the highest cost option to lift our current service levels. Those who chose a high level of service were driven by equity concerns and were willing to pay more to ensure all customers received similar levels of service.

Deliberation stage

The findings suggested that customers preferred somewhere between the current level of service and a higher level. This priority topic went to deliberation. The deliberative panel found current service delivery met current expectations in time to respond and frequency of interruptions. The panel recommended we continue to address unplanned disruptions in a proactive and timely manner (Recommendation 1.1) and that we notify and communicate with customers in a more proactive and customised way to improve accessibility for everyone (Recommendation 5.1).

We adopted these recommendations in our customer outcomes and experiences.

How we will be accountable to our customers

We will report on four measures that underpin our two customer experiences. These measures were voted for by our customer forum.

We will report on:

- our responsiveness and efficiency when there are water and sewer interruptions to demonstrate that we respond in a proactive and timely manner and provide a consistent level of service across the region with slight improvements
- overall customer satisfaction of those who contacted us in the past 12 months to measure the level of customer service customers receive.

Our targets are based on our 2020-23 average historical performance.

Table 5 Customer outcome 2 - When things go wrong, we fix them

When things go wrong, we fix them

We recognise that, in reality, some customers will experience interruptions to their service unexpectedly. When these happen, our water and sewerage maintenance crews are responsive and efficient to resolve the issue. We also provide excellent customer services when you contact us

Experiences	Report card measures	Our 2024-28 target	What we will do
Our water and sewerage maintenance crews are responsive and efficient if disruptions happen	Average time to fix a burst or leak in our main or trunk infrastructure (priority 1)*	< 465 minutes	 Maintain the current level of investment in proactive maintenance and renewal programs so interruptions don't become more frequent to provide customer the same level of service. Implement and review our asset management plans so they
	Average time to fix all reported< 117 minutes•Maintain the current level of investment, expsewer blockages/spills*•Maintain the current level of investment, expfor our responsive maintenance programs to service our customers expect.		 target those areas at greatest risk of interruptions. Maintain the current level of investment, expenditure and service for our responsive maintenance programs to deliver the level of service our customers expect. Extend our Guaranteed Service Level scheme to all customers to
	Percentage of unplanned water supply interruptions restored within five hours	>95%	compensate them they receive lower levels of service.
We provide excellent customer services when you contact us	Overall customer satisfaction of those who contact GWW in past 12 months*	>80%	 Continue to maintain our grades of service (call response times, call resolution times) from our customer call centre. Continue to respond quickly to emails. Finalise and implement our new customer communication management system so customers can select from a range of methods to engage with us. Modernise platforms, processes and data capabilities to support billing and collection services that meet water industry standards for communication and improve customer experience. Continue to provide dedicated business customer teams to service customers with particular needs.

When things go wrong, we fix them

• Security of critical infrastructure IT program to improve cyber security management to meet industry standards

Major commitments contributing towards this outcome

Asset Ecosystem and Asset Monitoring program of works (\$104.96m CAPEX)

Modernisation of GWW's customer experience platforms, processes and data capabilities (\$37.47m CAPEX)

Operating expenditure step change to uplift security of critical infrastructure IT program (\$4.5m OPEX)

*The report card measures were chosen and agreed by our Customer Forum. Our investment and expenditure forecasts consider our customer outcomes and are aligned to ensure measures are achievable.

3.1.3 Customer outcome 3 - We support our diverse communities and customers

Customers have told us that supporting our diverse communities' wellbeing and liveability through partnerships and supporting customers experiencing hardship is important.

Our customers will experience this outcome as:

- With our partners, we improve the wellbeing of our communities by providing alternative water to irrigate public green spaces.
- If our customers are having payment difficulties, we provide support.

What we heard from our customers

Customers told us that they value us supporting liveability for our communities and supporting customers experiencing hardship. Customers indicated they are willing to pay more to support customers experiencing hardship and to maintain or increase spending to address liveability through alternative water.

Exploration stage

WSAA's 2021 customer perception survey revealed that customers expect us to:

- help customers who struggle to pay their water bills and make additional allowances for customers with special needs (more than half of respondents)
- provide recycled water for public parks and community sporting grounds (47% of respondents)
- invest money into research and innovation to save water and work with councils to provide greener and cooler public spaces for recreation (more than one-third of respondents).

These values were tested in our exploration customer survey. Customers told us it was important that we:

- provide recycled water for public parks and community sporting grounds (48% of respondents)
- work with councils to provide greener and cooler public spaces for recreation (38% of respondents)
- look into alternative water sources like recycled water to improve our public spaces (74% of respondents)
- use alternative water to support agriculture (68% of respondents).

In the same survey, customers strongly supported our 'supporting communities to thrive' strategic outcome and its focus areas from our *2030 Strategy*. When we asked our stakeholders, they strongly identified using alternative water sources to improve public spaces for communities to thrive.

This was also evident in the exploration stage focus groups, with 28% of comments relating to supporting local communities and 17% relating to providing access to water for public green spaces, drinking water fountain and community amenities.

In the same exploration survey, customers also strongly supported us helping people who are experiencing hardship, with 46% of survey respondents and 56% of stakeholders interviewed saying it is important to them. We received some feedback from customers that although we had categorised this as part of the 'customers'

strategic outcome, it made more sense as part of the 'communities' strategic outcome. Our stakeholders also made it clear that supporting customers experiencing hardship was important to them.

Valuation stage

We took both priorities to our customers in the valuation stage, given the range of investment and expenditure options and bill implications for alternative water uses as well as the degree of support provided to customers experiencing payment difficulty.

In our 'best-worst' online survey, we explored where customers would like us to use alternative water. Customers were very supportive of using alternative water for agricultural purposes and to keep parks and trees healthy but less supportive to use it to keep sports fields green. Although more customers felt any investment was necessary, a quarter chose to do nothing and keep bills as low as possible. The majority of customers wanted to maintain or increase spending to support customers experiencing hardship and felt that reducing or doing nothing was the worst option.

In our bill simulator online survey, we received a mix of responses with 79% of customers willing to pay between the current spend on alternative water schemes to the most expensive option to fund a lot more schemes.

In our bill simulator focus groups, six out of eight groups thought we should do more to provide alternative water for public green spaces and two focus groups voted to do a lot more (invest in 10-15 new alternative water schemes). When asked why they wanted us to spend more on alternative schemes than we currently do, focus group participants referred to climate and global warming concerns as well as a desire for sustainable practices. Participants, however, did note that the most expensive option would increase bills significantly and felt it was too extreme.

Our bill simulator survey found that 53% of customers were willing to pay more to increase the number of customers supported. In our billing simulator focus groups, six out of eight focus groups, including the financially vulnerable group, chose the second most expensive option by increasing our support to customers. Verbatim comments and probing by the facilitator of focus groups sought to elicit the underlying values that drove customers to express their views. Their comments suggested that values of fairness and equity overrode concerns for their personal financial needs and were more at the forefront of their considerations due to cost of living challenges. Renters and small business owners voted to maintain the same number of customers we support annually.

Deliberation stage

Given the overwhelming support for increasing support for customers experiencing vulnerability, we included this in our customer outcome and did not take it to the deliberative panel.

While customers in the exploration stage supported liveability by providing alternative water to public assets, our valuation stage found customers emphasised partnering with local councils and communities over providing access to alternative water directly. With the mix of views across the various engagement techniques, we felt our deliberative panel should have a chance to review the evidence, ask questions and decide what was best for the whole community.

The deliberative panel reviewed our findings and evidence and made several recommendations including:

- Collaborate with councils for high value projects that can maximise the use of alternative water sources (large parks/gardens/ recreation). (Recommendation 3.1)
- Increasing the amount of alternative water (stormwater and recycled) facilities for more access to homes that don't have them. (Recommendation 3.2)
- Investment and advocacy in alternative water sources, for example, recycled water and stormwater for things such as watering parks and gardens, or for livestock to drink (not for human consumption). (Recommendation 3.3)

The deliberative panel also made recommendations relating to the manufacture of alternative water for irrigation and improving the quality of recycled water that is discharged to waterways. We discuss this in customer outcomes 4 and 5.

We adopted these recommendations, as well as supporting customers experiencing payment difficulty, in our high-level customer outcomes and experiences. We also included providing alternative water for agricultural uses in our outcomes, as it was strongly supported. However, we have included it in customer outcome 4.

Confirmation stage

Through the confirmation stage, we heard from councils that they strongly supported our plans for improving the liveability of our service region as outlined in outcome 3. Particularly, councils were supportive of our response to the panel's recommendations (Recommendation 3.2), with Brimbank City Council stating that GWW's `inclusion of a Stormwater Harvesting Partnership Fund is strongly supported and welcomed by Council'...^{viii}

How we will be accountable to our customers

We will report on three measures that underpin our two customer experiences. These measures were voted for by our customer forum.

We will report on:

- the number of additional schemes including stormwater harvesting projects to demonstrate that we are working with our partners to improve wellbeing and liveability of our communities
- our customers' overall perception of the value for money of our services
- the proportion of customers in our customer support program meeting their instalment plans to demonstrate that we are providing tailored support to our customers and building our community's financial resilience.

Our targets are based on our 2020-23 average historical performance.

Table 6 Customer outcome 3 - We support our diverse communities and customers

We support our diverse communities and customers

We will foster the wellbeing and liveability of our service region to support our communities to thrive economically, socially and environmentally. We will work with our partners to deliver new ways to use alternative water to increase green open spaces and amenity for our communities' physical and mental wellbeing. We will provide support to improve the financial resilience of customers experiencing hardship and support a thriving community.

Experiences	Report card measures	Our 2024-28 target	What we will do
With our partners, we improve the wellbeing of our communities by providing alternative water to irrigate public green spaces	The number of projects funded through the stormwater harvesting partnership fund*	2024-27 target: On track 2027-28 target: Met (10)	 Additional funding for 10 stormwater harvesting schemes with partners to save drinking water and improve liveability and amenity for our communities. The program will include a competitive, merit-based funding model which will ensure projects can provide the greatest liveability and environmental benefits at the lowest cost to the community. The additional funding has strong support by local councils and customers. councils to support alternative water and participate in Integrated Water Management forums. Implement our SWS/GWMUSS actions, including any alternative water actions, to support future water resources and liveability. Continue to deliver on our IWM plans and actions. Deliver our Werribee Zoo and Wyndham open space alternative water projects to irrigate public green spaces. Continue to advocate for a greener, more liveable west by leading programs such as Greening the West. Begin supplying our foundational and new Western Irrigation Network customers with alternative water from our Bacchus Marsh and Melton treatment plants (WIN).

We support our diverse communities and customers				
We support the financial resilience of our communities and help you if you're having payment difficulties	Customer satisfaction that our prices for our services represents value for money*	>60%	 Improved and expanded customer support program to proactively reach out and support more customers that may face hardship. Continue internal hardship processes, including referrals, payment plans, instalment plans and water efficiency assistance 	
	Proportion of customer support program participants meeting mutual obligations	>75%	 programs. Continue to explore with customers engagement methods and case management support programs to best support customers experiencing hardship. Continue programs that help confirm that a customer is not in hardship before their service is restricted 	

Major commitments contributing towards this outcome

10 New Stormwater harvesting schemes (additional \$12.8m CAPEX)

Recycled Water Growth and renewals programs (\$21.1m CAPEX)

Western Irrigation Netwok Program providing alternative water for irrigation (\$30.0m CAPEX)

Operating expenditure step change to increase services to customers experiencing hardship (\$5.2m OPEX)

Operating expenditure step change for the Werribee Irrigation Program providing alternative water for irrigation (\$3.3M OPEX)

*The report card measures were chosen and agreed by our Customer Forum. Our investment and expenditure forecasts consider our customer outcomes and are aligned to ensure measures are achievable.

3.1.4 Customer outcome 4 - We enable growth and help businesses thrive

We heard that supporting local businesses and industrial customers to thrive and supporting developers in our service region to enable growth is important.

Our customers will experience this outcome as:

- We provide excellent customer services when you contact us.
- We support agriculture with the right recycled water products for your needs.
- Developers and applicants find us easy, timely and consistent to do business with to get new customers connected.

What we heard from our customers

While our engagement program focused on residential customers, we also engaged with the development industry and business customers to understand what is important to them.

Exploration stage

Our customer survey found that customers strongly supported our 'delivering value to customers' strategic outcome and its focus areas from our *2030 Strategy*, with 44% of respondents rating having excellent customer service with fast response times as important to them.

We asked our focus groups what was important to them to 'support communities to thrive' (*2030 Strategy* pillar). They told us 'Supporting industry and business in a sustainable way' was important. Our stakeholders told us it's important that we don't 'get in the way of businesses growing and providing jobs'.

In parallel to our core engagement program, we engaged with developers, builders and industry to understand their values and preferences. We heard that:

- they were pleased that they were considered `customers' of GWW
- they liked talking to a dedicated team to respond to enquiries and requests in a timely manner
- their industry emphasises timeliness and ease of doing business.

Given this view, we tested our proposed customer outcome and experiences with the development industry. We received little feedback on the proposed customer outcome and promises and kept them the same.

As noted in customer outcome 3, we have incorporated an outcome and measure relating to providing alternative water sources to the agricultural industry. This was included as a deliberative panel recommendation to invest in technology to manufacture alternative water for irrigation and industry in a manner that is affordable (Recommendation 4.4).

We adopted these recommendations in our high-level customer outcomes and experiences.

How we will be accountable to our customers

We will report on five measures that underpin our three customer experiences:

- Business customer satisfaction to our responses to enquires and complaints to demonstrate the level of customer service we provide to our business customers to ensure we are easy to deal with.
- The volume of alternative water supplied to our agricultural customers, in particular customers in the west, to support a thriving agricultural industry.
- Application and process turnaround times for the developer and building industry to demonstrate we are timely and consistent. Specifically, we will report on the proportion of pressure and flow information applications, standard new customer contributions applications and standard plumbing applications completed within an appropriate time frame.

Table 7 Customer outcome 4 - We enable growth and help businesses thrive

We enable growth and help businesses thrive

We enable development and growth in our service region by making it easy to do business with us and providing excellent customer service when business customers contact us. We also support our agriculture with the right recycled water products for their needs.

Experiences	Report card measures	Our 2024-28 target	What we will do
We provide excellent customer services when you contact us	Business customer satisfaction on responses to enquires and complaints *	>65%	 Continue to provide dedicated business customer teams to service these customers' specific needs. Include small businesses in our customer support program to ensure all of our community thrives. Finalise and implement our new customer communication management system so customers can select from a range of methods to engage with us. Implement our new billings replacement system to provide more ways to communicate with customers.
We support agriculture with the right recycled water products for your needs	Volume of recycled water delivered for agricultural uses	>3,500ML	 Continue to treat and provide alternative water at a level of quality that meets the needs of our agricultural customers. Begin supplying our foundational and new Western Irrigation Network customers with alternative water from our Bacchus Marsh and Melton treatment plants (WIN).

We enable growth and help busine	esses thrive		
Developers and applicants find us easy, timely and consistent to do business with to get new customers connected	Pressure and flow information applications processed within five business days	>95%	 Continue to engage with developers to understand their preferences for doing business with us. Continue to streamline our processes so that applications (beyond the three measured) are
	Standard new customer contribution applications processed within 45 business days	>95%	processed in a timely manner.
	Standard plumbing applications completed on time within five business days	>95%	

Major commitments contributing towards this outcome

Providing sewer services to growth regions through Emu Creek branch sewer main and Sunbury Road outfall sewer (\$34.2m CAPEX)

Large investments in our water and sewer growth program (\$245.8m CAPEX)

Western Irrigation Network Program providing alternative water for irrigation (\$30.0m CAPEX)

Operating expenditure step change for the Werribee Irrigation Program providing alternative water for irrigation (\$3.3M OPEX)

*The report card measures were chosen and agreed by our Customer Forum. Our investment and expenditure forecasts consider our customer outcomes and are aligned to ensure measures are achievable.

3.1.5 Customer outcome 5 – We heal and care for Country

We heard that the health and resiliency of our waterways is important to our customers, and we recognise Traditional Owners as the original custodians of Country and their connection and obligation to care for water and Country.

Our customers will experience this outcome as:

- We limit and reduce our impact on the environment including from our treatment plants.
- We will meet our net zero emission targets by 2030.
- We actively support First Nations and Traditional Owners self-determination and provide access to water to achieve cultural values.

What we heard from our customers

We heard early in our engagement that customers strongly valued reducing our impact to the environment, improving the health of our waterways, our commitment to net zero and supporting First Nations and Traditional Owners. Customers indicated they are willing to pay much more for local benefits to reach net zero and reducing our impact on the environment from an engineering perspective to improve our waterway health.

Exploration stage

Through WSAA's 2021 customer perception survey, we know that over a third of respondents from our service region expect us to generate renewable energy, be carbon neutral, talk about the impacts of climate change and improve local waterways and waterway health.

These values were reconfirmed and tested in our customer survey. Customers told us it was important for us to:

- reduce the risk of wastewater spilling into creeks and waterways during heavy rain (51% of respondents)
- improve rivers and creeks for local wildlife and vegetation (49% of respondents)
- reduce our carbon emissions to zero in a way that creates jobs and improves liveability (33% of respondents)
- reduce the number of sewer spills (24% of respondents).

In the same survey, customers strongly supported our 'healing and caring for Country' pillar and its focus areas from our *2030 Strategy*. Respondents said it was important for us to:

- work with local communities to improve the health of their lakes, rivers, creeks and other waterways (77% of respondents)
- improve access to alternative water sources to save drinking water (55% of respondents)
- reduce carbon emissions, reduce waste from our operations and provide opportunities to use our reservoirs and catchments for cultural and educational uses (more than 40% of respondents).

This was also evident in the exploration stage focus groups, with 39% of comments related to caring for the environment and waterways, and 21% related to water security and conservation.

We heard that customers overwhelmingly support caring for the environment and waterways directly or through our processes such as reducing waste and emissions.

Valuation stage

We took these to our customers in the valuation stage, given the range of investment options and bill implications of caring for our environment and waterway health and how we deliver net zero emissions by 2030.

In our 'best-worst' online survey, participants were asked to identify the best and worst option from four possible ways for improving waterway health. We heard that customers were very supportive of improving waterway health through an engineering response, such as improving the quality of recycled water that comes out of sewerage treatment plants and reducing the chance of sewers overflowing and spilling into waterways during heavy rain. Around one in four respondents just wanted us to do the absolute minimum required by our legal obligations. In contrast, 52% of respondents thought that was the worst idea.

In the same survey, we asked participants about different options to reduce our emissions. We heard that customers are very supportive of reducing our emissions through treatment plant processes and operations, as well as investing in renewable energy projects locally, more so than planting trees in our service region. 49% of participants thought doing nothing was the worst idea.

We also took similar waterway health and net zero options into our billing simulator survey and focus group.

We asked customers to indicate their willingness to pay to address waterway health by selecting one of three options. We found over a quarter of survey respondents told us not to change what we currently spend on waterway health and to spend enough to meet compliance obligations. Another quarter were willing to pay significantly more to improve the health of all waterways in the region. The remaining 47% were willing to pay more than current levels and opted for the second most expensive option, investing in the most stressed waterways to improve river health.

In our bill simulator focus groups, four of eight groups opted to continue initiatives to meet compliance obligations and the remaining four chose the second most expensive option to invest in the areas with the most stressed waterways. As a result, we found mixed evidence on customers' willingness to pay for waterway and health.

We also asked customers their willingness to pay to address net zero emissions by selecting one of four options. We found overwhelming support, with 59% of customers willing to pay more than our current spending by investing in local renewable projects.

In our bill simulator focus groups, six of eight focus groups chose for the most expensive option, driven by their concerns about the environment, and found the benefits far outweighed the impact on bills.

Deliberation stage

Given the mix of findings in our valuation stage for improving waterway health and what customers told us in the exploration stage, we took this topic to our deliberative panel. We did not take reaching net zero to the panel given the widespread support and have included it in our outcome.

Our panel recommended an increased spend but focused their recommendations on:

- Education, community engagement and awareness to support waterway health (Recommendation 4.1)
- Investment in our water treatment plants to protect our overall waterway health and environment (Recommendation 4.2)
- Improve the quality of recycled water returning to waterways (Recommendation 4.3)
- Invest in technology that makes the creation and supply of manufactured water/alternate water for irrigation and industry affordable (Recommendation 4.4)

We adopted these recommendations, as well as supporting customers experiencing payment difficulty in our high-level customer outcomes and experiences. We also included providing alternative water for agricultural uses in our outcomes, as it was strongly supported. However, we have grouped it in our more non-residential customercentric customer outcome 4.

We adopted these recommendations in our high-level customer outcomes and experiences.

How we developed our Traditional Owners and First Nations experiences and measures

In addition to the experiences and measures discussed, we also engaged with Traditional Owners and First Nations people to ensure their voices are included in our price submission (outlined in Section 2.3.1).

Experiences and measures associated with Traditional Owners and First Nations people were not put forward to our customers for discussion. They have been drawn from engagement to develop our *2030 Strategy* and Reconciliation Action Plan.

We will continue to partner with Traditional Owners and First Nations people on their priorities during this regulatory period and beyond. If Traditional Owners indicate that their preference is to adjust our experiences and measures, we are committed to doing so in partnership.

We outlined our commitments to Traditional Owners and First Nations people and how we plan to action them through the 'what we heard' briefing note (supporting document).

How we will be accountable to our customers

We will report on five measures that underpin our three customer experiences. These measures were voted for by our customer forum.

We will report on:

- how we limit and reduce the impact on our environment including from our treatment plant processes
- our process to meet our net zero emissions by 2030
- our delivery of the actions outlined in our Reconciliation Action Plan and the development and implementation of our new Walking Alongside First Nations Commitment.

Table 8 Customer outcome 5 – We heal and care for Country

We heal and care for Country

We recognise that our health and the resiliency of our waterways depends on how we manage our water and sewerage services. We want to ensure that we continue to reduce and limit our environmental impact including from our treatment plants and reduce our emissions to improve our environment to improve our waterways and environment. We also recognise that Traditional Owners as the original custodians of Country and their connection and obligation to water and natural resources.

Experiences	Report card measures	Our 2024-28 target	What we will do
We limit and reduce our impact on the environment including from our treatment plants	Proportion of beneficial re- use of biosolids from our treatment plants*	>90%	 Investigate the most beneficial reuse opportunities for biosolids including soil reuse. Invest in our treatment plants to build capacity and ensure we meet our EPA's discharge licence commitments and improve waterway health in the highest risk areas.
	The number of EPA-notifiable sewer spills*	<13	 Continue to maintain our sewerage network to limit the risk of sewer spills. Engage with communities near our inland treatment plants and with our Traditional Owners to understand waterway values.
We will meet our net zero emission targets by 2030	Tonnes of CO2 equivalent emissions	2024-25 target: <27,586 tonnes 2025-28 target: <27,586 tonnes*	 Develop and implement our revised net zero 2030 pathway as GWW. Investigate and reduce emissions at our high energy consuming treatment plants.
		*We are currently progressing on a pathway to net zero by 2030. At the time of submission, the target tonnes of CO2 equivalent emissions beyond 2024-25 have not been finalised. We anticipate finalising these targets before 1 July 2024 and will inform	 Investigate our wastewater treatment plants. Investigate our wastewater treatment plants to better understand the options to reduce methane and nitrous oxide emissions. Explore and develop extra solar installation opportunities. Participate in securing carbon offsets for the water sector (VicWater Carbon Offsets Working Group).

We heal and care for Cou	intry		
		the ESC with these targets as soon as possible.	Investigate innovative solutions in our service region.
We actively support First Nations and Traditional Owners self-determination and provide access to water to achieve cultural values	Deliver actions outlined in our RAP	 On track - Refer to traffic light report 2025-26: Met - Delivered on actions in our 2023-2025 RAP and begun development or refresh of next RAP 2026-28: On track - Continued 	 On track – Refer to traffic light report 25-26: Met – Delivered on actions in our 2023-2025 RAP and begun development or refresh of next RAP 26-28: On track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued implementation or refresh of next RAP Con track - Continued RAP Cont track - Continued RA
	Development and implementation of our Walking Alongside First Nations Commitment	2024-28 target: On track (refer to our commitments in our Walking Alongside First Nations Commitment)	knowledge-gathering, capacity and capability uplift.

Major commitments contributing towards this outcome

Improving waterway health in Woodend (\$58.4m CAPEX)

Supporting waterway health in Gisborne and meeting Environment Protection Authority licence requirements (\$29.9m CAPEX)

Supporting waterway health and growth in Romsey (\$23.9m CAPEX)

Sewer treatment growth and renewals programs (\$132.8m CAPEX)

Operating expenditure step change to achieve Traditional Owners water objectives (\$4m OPEX)

*Applicable report card measures were chosen and agreed by our Customer Forum. Our investment and expenditure consider our customer outcomes and are aligned to ensure measures are achievable.

Supporting documents for Outcomes:

- Focus group feedback report
- Exploration stage report
- Valuation stage report
- Deliberative panel report
- Deliberative panel recall day report
- Customer forum summary report
- Confirmation stage report
- Price Submission Customer Outcome handbook

3.2 Service standards

Service standards specify the minimum level of service a customer can expect to receive from us.

Our deliberative panel recommended that we maintain our current level of unplanned outages. Based on this recommendation, we propose a revised set of annual targets for 2024-2028 based on GWW three-year average performance (2020-23). **Table 9** includes the recently updated Customer Service Code and amendments to three customer service code indicators.

Where our GWW three-year average performance outperformed either CWW or WW historical targets, we propose to maintain the minimum existing level of service. Where our three-year average performance was between CWW or WW existing level of service or did not meet either level of service, we set the target equal to our three-year average performance.

Service standards	Current target		Proposed target
	Central region	Western region	GWW
Water service standards			
Customers experiencing more than five unplanned water supply interruptions in any 12-month period	No more than 0 customers	No more than 0 customers	N/A
Maximum number of unplanned water supply interruptions a customer may experience in any 12-month period	N/A	N/A	5 interruptions
Average time taken to attend priority 1 bursts and leaks	32 minutes	30 minutes	30 minutes
Average time taken to attend priority 2 bursts and leaks	40 minutes	60 minutes	90 minutes
Average time taken to attend priority 3 bursts and leaks	252 minutes	1440 minutes	315 minutes
Average time taken to restore customers' water supply – planned	125 minutes	126 minutes	125 minutes
Average time taken to restore customers' water supply – unplanned	133 minutes	240 minutes	150 minutes

 Table 9 Proposed service standards 2024-28

Service standards	Current target		Proposed target
	Central region	Western region	GWW
Minimum water pressure or flow rate a customer should receive	N/A	N/A	20 L/minute (for 20 mm meters)
Sewerage service standards			
Customers receiving more than 3 sewer blockages in the year	No more than 6 customers	No more than 0 customers	N/A
Maximum number of sewer blockages a customer may experience in any 12-month period	N/A	N/A	3 interruptions
Average time taken to attend sewer spills		30 minutes	30 minutes
Average time taken to attend blockages	- 31 minutes	60 minutes	
Average time taken to rectify a sewer blockage	125 minutes	47 minutes	150 minutes
Percentage of spills contained within five hours	100%	100%	N/A
Maximum time taken to contain a sewer spill	N/A	N/A	300 minutes

These service standards are reflective of our collective 3-year average performance.
3.3 Guaranteed service levels

We recognise the vital role our services play in the lives of our customers and the impact any disruption of these services may cause.

We have proposed a refreshed Guaranteed Service Level (GSL) scheme that specifies the customer experiences we will guarantee, and the rebate we will apply to a customer's next bill when these service levels are not met during the 2024-2028 period.

3.3.1 How we engaged our customers

To ensure we are delivering services that meet our customers' expectations and values, we set up a customer forum in May 2023. The forum helped us develop outcomes, experiences, and measures to show accountability to our customers over the regulatory period.

Customers were asked which outcomes and experiences, if not met, would require a rebate and what would be the appropriate rebate to apply. They were also asked if there was anything missing from the outcomes and experiences that would warrant a rebate.

We checked our customer advisory group comfort with the refreshed GSL scheme.

3.3.2 Our proposal and amendments

We heard from our deliberative panel that:

- aligning service levels between regional and urban customers was important and that we should address the highest risk areas first (Recommendations 2.3 and 2.5)
- unplanned disruptions were important and needed to be managed in a timely and proactive manner (Recommendation 1.1)
- more funding should be allocated (from managing unplanned disruptions) to communication with customers to inform them of disruptions early (Recommendation 5.1).

Broadly, these recommendations tell us that customers understand that disruptions will occur when we improve the system; however, they prefer fewer unplanned interruptions. They would prefer that interruptions were planned and well communicated and occurred in a way that was most convenient to them.

We have incorporated this feedback into our GSLs with two minor amendments, excluding planned interruptions in the total number of interruptions and removing the reference to resolving planned interruptions in timely manner. Customers will be guaranteed that we will only undertake planned works in a time most convenient to them (outside of peak hours) and that we will inform them as early as possible of planned works.

We have increased the value of GSL payments to customers to reflect inflation since 2018.

Water quality GSL

We heard from our customers that they expect consistent high quality and safe drinking water. Any water quality incident, regardless of cause, is seen as an interruption and breach of a core public health service and safe drinking water should be guaranteed.

Our commitments to our customers and community

Following water quality incidents in 2021, we have worked with South East Water, Yarra Valley Water and Melbourne Water to achieve a consistent Melbourne-wide approach for a GSL for water quality events.

We propose to adopt the Melbourne-wide approach for water quality for our customers.

Overall, customers in the region previously served by CWW will see no material change to their GSL scheme, except for the increase in rebate amount and new Melbourne-wide water quality GSL. Customers in the region previously served by WW will see a significant increase in GSL scheme offers and rebate amounts as a result of this harmonisation.

We propose the following GSLs and rebates from 1 July 2024 in **Table 10**.

 Table 10 Proposed GSL scheme 2024-28 (\$, nominal)

Theme	Current GSLs		Proposed GSLs Proposed GSL amount	
	Central region	Western region	GW	w
Guaranteed ser	rvice levels – water s	ervice		
Limiting high number of interruptions	More than 5 unplanned water supply interruptions within any 12- month period	N/A	More than 5 unplanned water supply interruptions	\$250
	N/A	More than 5 water supply interruptions within any 12- month period	within any 12- month period	
	More than 3 unplanned water supply interruptions within any 12- month period	N/A	More than 3 unplanned water supply interruptions within any 12- month period	\$125
Resolving interruptions in an appropriate timeframe	Unplanned water supply interruption not restored within 5 hours of notification	N/A	Unplanned water supply interruption not restored within	\$125
	N/A	Planned water supply interruptions longer than notification given	5 hours of notification	

Our commitments to our customers and community

Theme	Current GSLs		Proposed GSLs	Proposed GSL amount
	Central region	Western region	GV	vw
	Planned water supply interruptions during peak hours (5am to 9am and 5pm to 11pm	Planned water supply interruptions during peak hours (5am to 9am and 5pm to 11pm)	Planned water supply interruptions during peak hours (5am to 9am and 5pm to 11pm	\$125
Notifying customers early	Failure to give at least 2 business days' notice of a planned water supply interruption	N/A	Failure to give at least 2 business days' notice of a planned water supply interruption	\$100
High quality and safe drinking water				Affecting <50 customers: \$5000 community rebate
	N/A	N/A	A water quality advisory notice is issued	Affecting 50 or more customers: \$10,000 community rebate per impacted postcode
Guaranteed ser	vice levels – sewera	ge service		
Limiting high number of interruptions	More than 3 sewer blockages within any 12-month period	More than 3 sewer blockages within any 12-month period	More than 3 sewer blockages within any 12-month period	\$125
Resolving interruptions in an appropriate timeframe	Sewer blockages not restored within 5 hours of notification	N/A	Sewer blockages not restored within 5 hours of notification	\$100
	Sewage spill not contained within 5 hours of notification	N/A	Sewage spill not contained within 5 hours of notification	\$100
No spills within your home	Sewage spill in a house, caused by the business or a failure of the business' system(s)	N/A	Sewage spill in a house, caused by the business or a failure of the business' system(s)	\$1,200

Our commitments to our customers and community

Theme	Current GSLs		Proposed GSLs	Proposed GSL amount
	Central region	Western region	GW	ſW
	Sewage spill in a house, caused by the business or a failure of the business' system(s), not contained within 1 hour of notification	Sewage spill in a house, caused by the business or a failure of the business' system(s), not contained within 1 hour of notification	Sewage spill in a house, caused by the business or a failure of the business' system(s), not contained within 1 hour of notification	\$3,500
Guaranteed se	ervice levels – Other		· · · · ·	
Taking reasonable endeavours when taking action	Restricting the water supply of, or taking legal action against, a residential customer prior to taking reasonable endeavours (as defined by the ESC) to contact the customer and provide information about help that is available if the customer is experiencing difficulty paying.			\$350

Our engagement has shown us how much our customers are willing to pay for the services they receive. Our customers endorsed five new customers outcomes, with experiences and performance measures for which we are accountable. At each stage of our engagement program, we have updated our investment and expenditure plans to reflect customer sentiment and expectations. Our major commitments support delivery of our customer outcomes and the experiences that define them. The diagram below shows how our customer outcomes and experiences will be delivered through investment and expenditure during the regulatory period.



Experience Commitments delivering benefits to customers		
Water that tastes great, is high quality and always safe to drink	 New water filtration plant to provide safe drinking water and meet demand in Romsey. Drinking water quality roadmap to improve water quality for all customers. 	
Water that is there when you turn on the tap	 Pipelines, pump stations, tanks and minor works to improve capacity, resilience, reliability and water quality in Macedon Ranges, Sunbury, Diggers Rest and Bulla. New storage tanks to ensure reliable water supply for growth areas in Sunbury. Plan asset management to target areas at greatest risk of interruptions. Asset Delivery Organisation Review (ADOR) to support delivery of infrastructure to ensure resilience to growth and climate change. 	
Your sewerage service works without interruptions or blockages	 New 700m sewer in CBD to support growth and minimise risk of sewer spills and structural failure Improve our capacity to deliver sewerage system infrastructure. 	

When things go wrong, we fix them

Experience	Commitments delivering benefits to customers		
Our water and sewerage maintenance crews are responsive and efficient if disruptions happen	 New billing and collections system to give customers choice in the way we communicate with them and access to a self-service online portal. Upgrade and consolidate digital systems that monitor, record and report on asset condition, providing rapid response to issues and supporting preventative maintenance. Improve asset and works capability, geospatial capability and SCADA technology to improve communication with customers, community and industry partners. Maintain service levels (call response and resolution) from our customer call centre and dedicated business customer teams. 		
We provide excellent customer services when you contact us	 Modernise platforms, processes and data capabilities to support billing and collection services, meet industry standards for communication, and improve customer experience. 		



$\circ \bigcirc \circ$ We support our diverse $\frown \circ$ communities and customers

Experience	Commitments delivering benefits to customers
With our partners, we improve the wellbeing of our communities by providing alternative water to irrigate public green spaces	 Invest in additional alternative water schemes to support social and environmental benefits by irrigating public green spaces and reducing our reliance on catchment water. Advocate for a greener, more liveable west by leading programs such as Greening the West and Werribee Zoo and Wyndham open space alternative water projects.
We support the financial resilience of our communities and help you if you're having payment difficulties	 Dedicate extra resources to identify customers who are having difficulty paying bills and provide tailored services. Increase funding for customer support services, including referrals, payment plans, matched payments and water efficiency assistance programs.



We enable growth and help businesses thrive

Experience	Commitments delivering benefits to customers
We provide excellent customer service when you contact us	 Continue to provide dedicated business customer teams to service customers' specific needs. Include small businesses in our customer support program to ensure all our community thrives.
We support agriculture with the right recycled water products for your needs	 Provide alternative water at a level of quality that meets the needs of agricultural customers. Supply Western Irrigation Network customers with alternative water from Bacchus Marsh and Melton treatment plants.
Developers and applicants find us easy, timely and consistent to do business with to get new customers connected	 Engage with developers to understand their preferences for doing business with us. Dedicate resources to ensure applications are processed in a timely manner.



Heal and care for country

Experience	Commitments delivering benefits to customers
We limit and reduce our impact on the environment including from our treatment plants	 Major upgrade to Woodend Recycled Water Plant to improve waterway health and compliance with GED and EPA licence conditions. New recycled water treatment facility in Gisborne to provide environmental benefits, cater for growth, support waterway health, and comply with EPA licence. New water filtration plant to provide safe drinking water and meet demand in Romsey. Engage with Traditional Owners and communities near our inland treatment plants to understand waterway values.
We will meet our net zero emission targets by 2030	 Develop and implement revised GWW net zero 2030 pathway. Explore and develop extra solar installation opportunities. Participate in securing carbon offsets for the water sector (VicWater Carbon Offsets Working Group) (funds not recovered through this price submission).
We actively support First Nations and Traditional Owners self-determination and provide access to water to achieve cultural values	 Engage meaningfully with Traditional Owners and First Nations people supported by increased resources for policy and partnership objectives. Deliver on our Reconciliation Action Plan actions. Submit a project proposal to return water to Traditional Owners (as outlined in Central and Gippsland Region Sustainable Water Strategy).

4.1 Capital expenditure

Summary

- Capital expenditure of \$1.72 billion is proposed for 2023-24 to 2027-28
- Our capital expenditure is increasing to reduce risk, improve compliance with regulatory obligations, and deliver on our customer outcomes.
- We have carefully considered what the business has been able to deliver in the past and proposed capital expenditure that is deliverable within the next regulatory period.
- Our biggest investment areas are in:
- new water and sewerage infrastructure to support growth
- water and sewage treatment
- water main renewals.
- Investment in asset monitoring systems and information technologies:
- provide better asset data and improve communications
- improve customer experience platforms
- strengthen data security
- digital business enabling functions
- We are undertaking an asset delivery transformation program which will increase our capability uplift to create efficiencies in the management and delivery of our capital program.

Our proposed capital program for 2023-24 to 2027-28 will deliver trusted water and sewerage services for our communities now and in the future and is key in delivering Sustainable Development Goal 6: Clean Water and Sanitation.

Our proposed capital program for 2023-24 to 2027-28 will address key risks and ensures reliable delivery of water supply, sewage treatment and retail services. In an environment of high growth and climate change, we have chosen to address key risks to public health, service delivery and the environment. This is supplemented with programs that will support continuous improvement, provide better understanding of risk, and enable more efficient delivery of our capital programs in the future. Our proposed program aligns with what customers told us is important.

4.1.1 Capital program prioritisation process

GWW inherited two distinct capital programs with different investment priorities from the two legacy businesses, which our 2024 price submission aligns. The differences and impacts on our capital program management and delivery are outlined in Section 4.11.3.

GWW has been refining its long-term capital program since integration in 2021. Through our prioritisation process we collated information from both legacy businesses capital programs to create a holistic understanding of risks and priorities.

GWW has undertaken an enterprise-level prioritisation process focused on addressing operational risks, as outlined in our risk management framework. The impacts to GWW, our customers and wider environment of not delivering each project or program has been considered.

Each investment was assessed against GWW's risk management framework categories (outlined in Section 10) and assigned a score based on total risk if the investment did not go ahead. This was an effective risk-based prioritisation of the capital plan even when comparing different types of investment.

In addition to capital risk assessments, GWW used the following principles to determine the areas of investment and the overall size and value of the capital program:

- Delivering stable bills for our customers.
- Investments must be justified as prudent and efficient.
- The capital works need to be delivered within the regulatory period and cannot reasonably be deferred.
- The scale of the program is deliverable given the current external and internal environments.
- We will not seek to recover costs for transfer assets that may be delivered by other businesses.
- Investments support delivery of price submission customer outcomes and align with deliberative panel recommendations.

GWW used a bottom-up build for the capital program with an overall ceiling based on maintaining affordability in our bills. Our planned investments are prudent and efficient, address the highest risks first and allow GWW to keep bills affordable for our customers.

4.1.2 Capital program overview

Capital expenditure of \$1.72 billion is proposed for the period 2023-24 to 2027-28. The process improvements implemented through the Asset Delivery Organisational Review program will ensure that the capital expenditure proposed is deliverable within the next regulatory period. Our capital program management and delivery for the previous regulatory period is detailed in Section 8.4.

Our capital expenditure is predominantly driven by growth (\$843 million), with renewals also forming a large component (\$532 million). Improvements and Compliance make up the smallest portion of our overall capital expenditure (\$347 million). **Figure 4** and **Table 11** show the breakdown of the capital program into cost drivers.



Figure 4 Capital program breakdown by cost driver (\$million, 2023-24)

Cost Driver	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Growth	148.72	182.44	167.71	185.61	158.35	842.83
Improvements/ Compliance	89.68	74.71	75.55	61.79	45.05	346.77
Renewals	95.96	113.71	105.51	110.52	106.11	531.81
Total	334.35	370.86	348.77	357.92	309.52	1721.42

Table 11 Capital expenditure by cost driver (\$million, 2023-24)

The Asset Delivery Organisational Review has identified a considerable work program that will build our capacity and capability to deliver the infrastructure required over the next decade. GWW is currently implementing recommendations from the Asset Delivery Organisational Review and many uplift initiatives will be delivered over the next 12 months. In the 2023-24 to 2027-28 period and the subsequent regulatory period we expect to see improvements in the delivery of our capital programs.

Investments in infrastructure critical to reducing risk and improving environmental compliance form the foundation of our proposed capital plan. Our largest investment areas are our Sewer and Water Growth programs driven by the requirement to service new growth in one of Australia's fastest growing regions.

These investments will support customer outcome 1, safe and resilient water services, and customer outcome 3, we enable growth and help businesses to thrive. We also recognise the previously constrained investment in the western region and ageing infrastructure in the central region. A key focus area is investment in our water and

sewer treatment growth and renewals programs to comply with our general environmental duty (GED) under the *Environment Protection Act 2017 (Vic)* and Environment Protection Authority Victoria (EPA) licence requirements and have the capacity to service growth.

Our investments in consolidating and improving asset monitoring systems and operational technology will provide better asset data. This will optimise the timing of future infrastructure, improve our ability to predict faults before they occur, and respond quickly when they do. It will also improve customer service and communication particularly around unplanned disruptions.

The capital program includes the infrastructure uplift required to bring together a regional urban and a metropolitan water corporation with different functions, processes and asset management regimes and practices. It considers the diversity of our customers and the current different levels of service within our service region. Tied to this is the need to service growth in what is Australia's fastest growing region.

The investment proposed (\$1.7 billion) for the period 2023-24 to 2027-28 is higher than the sum of investments proposed by the former CWW and WW in their previous price submissions. The increase is due to:

- customer growth in the western region being higher than anticipated
- previous underestimation of the investment required to service growth in the western region
- higher level of risk held in the western region, which has resulted in regulatory breaches.

Our commitment to providing safe, reliable and resilient services to our customers is evident in the program, we do this through the mitigation of critical risks, addressing pressing growth requirements and delivering on our customer outcomes.

Business cases have been prepared for all major projects and programs and include detailed analysis of the investment, including:

- an outline of the problem to be addressed
- the expected benefits the investment will deliver for customers
- the options that were considered and justification for the option selected
- details of the risk assessment.

Appendix F provides a summary of the top 10 business cases. The total expenditure of the top 10 major projects is \$379.4 million, which is 22% of the planned capital expenditure over the 2023-24 to 2027-28 period.

Table 12 Overview of top 10 major projects (\$million, 2023-24)

Project	Project summary	Risk being addressed	Total capital (2023-24 to 2027-28)
Improving waterway health in Woodend	Major upgrade to Woodend RWP treatment assets based on outcomes of the 2022 Woodend RWP Master Plan	Compliance with GED and EPA licence conditions	58.39

Project	Project summary	Risk being addressed	Total capital (2023-24 to 2027-28)
Improving water supply reliability in the Macedon Ranges	Pipelines, pump stations, tanks and minor works to improve capacity, resilience and water quality	Insufficient water supply to Rosslynne, precents water restrictions/loss of supply (approx. 15k customers)	55.87
Supporting CBD growth with better sewer capacity	700m of sewer that services the entire flows of CBD. Stage 4 of the CBD Sewer Strategy approved in 2018	Sewer spills in Spencer St/Flinders St/Wurundjeri Way in the CBD due to insufficient capacity or structural failure	46.45
Modernisation of customer experience and data capability	Modernisation of GWW's customer experience platforms, processes and data capabilities that support GWW's billing and collection services	Ability to meet Water industry Standards for communication with customers. Manual data management across two different systems creating risk of errors and non-compliance	37.47
Water security for Sunbury and the western region	A pipeline and weather pump station to ensure provision of a reliable and secure drinking water supply for Sunbury, Diggers Rest and Bulla	Unable to meet peak demands in Sunbury by 2026. Remove single source of supply risk from Shepherds Lane pump station	36.31
Providing sewer services to our growth regions	EMU Creek Branch Sewer Main & Sunbury Rd outfall sewer. Construction of 3.5km of 525/600 pipe along Melbourne-Lancefield Rd	Insufficient capacity in sewer network resulting in spills. Large numbers of new customers serviced by education as sewer does not have capacity.	34.25
Supporting waterway health in Gisborne	New 3.65 ML per day recycled water treatment facility that will provide environmental benefits and cater for growth	Compliance with Gisborne RWP volumetric discharge license	29.90
Water supply reliability for Sunbury	Constructing new Water Storage Tanks to service growth areas in Sunbury	Lack of minimum Water supply pressure and water volume during peak demands in Sunbury	29.04

Project	Project summary	Risk being addressed	Total capital (2023-24 to 2027-28)
Safe drinking water in Romsey	New Water Filtration Plant to provide drinking water to existing Romsey Township water network, replacing existing plant	Inadequate plant capacity to always meet demand. Current plant at the end of life and already unable to meet demand during high demand periods	27.83
Supporting waterway health and growth in Romsey	Plant upgrade required to ensure compliance. New primary and secondary lagoons to be added, inlet works improvement required.	Plant has more capacity to meet growth in Romsey catchment and produces water quality sufficient to manage volumes through reuse of recycled water	23.87

Our capital expenditure program for the period 2023-24 to 2027-28 is grouped into investment portfolios that consist of the top 10 projects and capital work programs. **Table 13** provides a summary of our major investment portfolios for the 2023-24 to 2027-28 period.

Table 13 Major investments by portfolio (\$million, 2023-24)

Investment portfolios	What the portfolio will deliver for customers	Top 10 projects	Remaining capital programs	Total
Network growth	High growth areas will have the capacity in their water and sewer network that meet service standards	201.91	386.10	588.0
Reliability	Customers across GWW's service area will have a reliable water and sewer network that meets service standards. High consequence water and sewer assets are being renewed in a sustainable way.	-	480.06	480.06
Sewage and water treatment	Water treatment plants have the capacity and reliability to meet customer demands. Sewer treatment plants have the capacity and reliability to manage risks to environment and human health.	139.98	187.32	327.30

Investment portfolios	What the portfolio will deliver for customers	Top 10 projects	Remaining capital programs	Total
Digital and customer focus	Improvements in customer experience and data security and essential digital solutions to enable core business functions.	37.47	129.00	166.47
Asset ecosystem and monitoring	Improved communication to customers when operational issues occur. Better insight to more effectively target preventative maintenance programs, delivering greater benefit to service reliability.	-	104.96	104.96
Other	Improved local liveability outcomes through stormwater harvesting projects and reduced GWW GHG emissions. Plus the capitalisation of the Asset Delivery Organisation Review (ADOR) program	-	54.61	54.61

4.1.3 Capital forecasts

Projects and program costs have been based on P50 estimates prepared using:

- unit rate tables
- past projects, first principle and supplier prices
- independent engineering consultants and contractors.

Volatility in the construction market has posed a significant challenge to all infrastructure-based organisations over the past five years. The Building Construction Index for Victoria and Heavy & Civil Engineering Construction Index have had average annual increases of above 7% in the last five years. In 2023, the Building Construction Index for Victoria was 10.7% compared to CPI of 7%. Due to the current volatility in construction costs, where we have inflated future costs we have done so using CPI, rather than the Building Construction Index. GWW will hold the risk of increases higher than CPI on behalf of our customers.

We have not inflated all future capital costs, and where we have inflated them we've used CPI rather than the construction index. Rather, we have applied the following principles:

- Programs with an established delivery model were not adjusted for inflation even if the estimate was built using 2022-23 unit rates or information.
- Projects under contract and in delivery not adjusted for inflation.
- Cost updates later in the development of the capital plan were treated as Real \$2023-24 estimates, mainly applicable to IT investments.

Our non-infrastructure (IT) related capital expenditure was forecast using the following principles:

- The projects were first modelled into a detailed budget tracker using a bottom-up approach. Using the variables of scope, people and time, a detailed draft project cost estimate was created.
- These estimates were then validated in a series of cross-functional workshops that consisted of teams from technology and across the business, focusing on the business outcomes that were required. Workshops considered the assumptions that needed to be factored into the estimates.
- The estimates were validated through a series of further checks including using 2022-23 cost baseline data for comparison and using real world costs from other water corporations who have delivered similar projects.

4.1.4 Removal of uncertain projects

Uncertain projects have been identified and excluded from upfront cost recovery in this period. This includes projects that are considered necessary but have not been fully scoped, costed and developed. We have identified large projects that are 'uncertain' by the definition applied in the guidance paper and delayed these until the subsequent regulatory period to allow for better planning. GWW has adopted risk on behalf of customers by excluding these projects. If the projects become necessary within this regulatory period, we will not recover any costs until they are deemed prudent and efficient and rolled into the Regulatory Asset Base (RAB) at the end of this regulatory period.

These uncertain projects may still be delivered this regulatory period if their need is confirmed. **Table 14** lists uncertain projects for which we will not recover revenue for this regulatory period.

Project	Scope	Why we haven't included in PS24	Estimated order of magnitude cost
Brimbank Park sewer pump station storage	To install underground storage at Brimbank Park Pump Station to support hydraulic compliance in the network which is currently limited by constraints in Melbourne Water's (MW) Maribyrnong River sewer main.	GWW is working with MW to confirm the funding and delivery arrangements as the primary benefits delivered are compliance for MW. This project will proceed in the regulatory period once the cost recovery mechanism has been confirmed.	11
Holden to Cottrell transfer system	A transfer system including large diameter pipelines, a pump station and tank site that will increase the transfer capacity in the Melton Growth Area to meet the demands of growth. These	GWW is working with MW to confirm the accountabilities and funding mechanisms for building and operating transfer infrastructure within the Urban Growth Boundary. GWW will fund smaller growth upgrades required over the price submission period to manage	>100 over 10 years

 Table 14 Uncertain projects removed from the capital program (\$million, 2023-24)

Project	Scope	Why we haven't included in PS24	Estimated order of magnitude cost
	assets provide the required capacity and resilience to supply the rapidly growing growth area.	the supply risks while these accountabilities are refined.	
Merrimu Water Treatment Plant major upgrade	The Merrimu Plant requires a major upgrade to increase the capacity, remove critical safety risks and improve the reliability of the plant to meet the demands of growth.	The Merrimu Master Plan has not been updated as there are uncertainties regarding the impacts of future supply augmentations. GWW has funded critical upgrades in this price submission (\$16m) but the remaining costs of the major upgrades have been deferred until the Master Plan has been updated.	42
		The deferral of this expenditure creates a risk to the reliability of the plant to meet customer demand. This will be managed through operational controls and prioritising capital expenditure as required.	
Greek Hill water transfer system	A series of tanks and pump stations that will increase the transfer capacity in Wyndham to meet the demands of growth. These assets provide a secondary source of transfer supply to growth areas which will be critical to water security.	GWW is currently leasing an underutilised Barwon Water (BW) asset to defer this capital expenditure. GWW is working with BW and MW to optimise transfer infrastructure in the region before proceeding with asset delivery and confirming asset ownership.	42
Melton Recycled Water Treatment Plant wet weather storage and biosolids solar dryer	Building additional storage at the front end of the plant to protect the treatment process during storm events and building facilities to dry biosolids from several GWW plants in one central location.	Melton Recycled Water plant will receive approximately \$48m in growth upgrades in addition to recurring renewals and maintenance improvements in PS24. The large upgrades include additional bioreactors, inlet works improvements, primary sedimentation tank upgrades and increases in capacity for the Class A Plant. It is not feasible to deliver any further upgrades within the regulatory period and the wet weather storage and solar dryer are not as critical to compliance. GWW is also investigating alternative technologies for biosolids management that could be deployed instead of the solar dryer.	29

Project	Scope	Why we haven't included in PS24	Estimated order of magnitude cost
		The deferral of this expenditure creates a risk to the ability plant to manage the volume of biosolids generated from our operations. This will be managed through operational controls and prioritising capital expenditure as required.	

4.1.5 Ongoing management of our capital program

The capital plan developed for this submission represents our best view of investments for the 2023-24 to 2027-28 period. However, throughout the period we will actively manage our capital expenditure program by regularly reviewing and reallocating resources based on our strategic priorities, risk mitigation, asset performance, customer priorities and environmental factors. We will refine and embed the enterprise prioritisation approach used in this price submission to support decision making in the development of the annual corporate plan and business planning. As part of the annual planning process, we will prioritise capital expenditure throughout the regulatory period to ensure we are investing in areas that will deliver the most benefit to our customers.

Capital program governance

GWW has a defined governance structure to manage capital expenditure. The Business Investment Committee (BIC), made up of the executives, manage all capital expenditure within the current financial year and future years. This committee meets monthly. Its role is to:

- review the financial performance of the business
- assess and endorse annual capital budgets for the corporate plan
- review and endorse projects for board approval (projects greater than \$5 million).

BIC is supported by the Asset Management Steering Committee (AMSC). The AMSC drives the implementation of GWW's Asset Management Policy and Asset Management Maturity and provides recommendations to BIC on the risks and priorities of infrastructure investment.

The BIC is also supported by the IT Project Management Office (PMO) and the Infrastructure PMO. The Infrastructure PMO has been established to support the uplift in GWW's ADOR Program and is driving the implementation of GWW's Portfolio Project Management Framework (PPMF).

Capability and capacity building

Looking to the future, we are enhancing our asset delivery maturity and addressing pain points across the asset delivery lifecycle. The Asset Delivery Organisational Review program will enable GWW to successfully deliver current programs, while establishing the foundations to scale for future growth. To support the delivery of our capital program we are implementing:

- A PPMF that ensures consistent standards for upfront planning and risk identification, standardises cost estimation and business case development and increases project governance requirements.
- An Infrastructure PMO with cost estimation, scheduling and risk capabilities that will support GWW to deliver its program on time and on budget.
- A centralised Procurement function with commercial and contract capabilities that will support GWW to deliver efficiencies in procurement and comply with State Government requirements.
- A dedicated Project Feasibility function that will lead business case development and improve the service need, risk and options analysis in business case development.
- Improved project management and project leadership through training, mentoring and additional support from enabling functions such as the PMO and centralised procurement functions.

These improvements are being implemented in 2023 and will be in place to drive the implementation of the 2023-24 to 2027-28 capital program.

Supporting documents for capital expenditure:

- Outline of capital program governance approach
- Strategic Asset Management Plan
- Capital prioritisation final report
- Price submission capital forecast
- Asset Delivery Organisational Review Business case
- Top 10 major business cases
- Program justification documentation

4.2 Operating expenditure

Summary

- Average controllable operating expenditure net efficiency of 0.19% per annum over the four years (2024-25 to 2027-28) is proposed.
- Cost per connection will decline from \$341 in 2022-23 to \$310 in 2027-28.
- Our total four-year prudent and efficient controllable operating expenditure is \$876.1 million.
- Total non-controllable expenditure for the four-year period is \$1,644.8 million. Bulk costs to Melbourne Water for water, sewerage and recycled water make up the majority of this cost, accounting for 59% of total operating expenditure.
- Our total forecast prudent and efficient operating expenditure is \$2,520.9 million over four years, which is an average of \$630.2 million per year.

The integration of CWW and WW has fundamentally changed our operating circumstances and our operating expenditure. Integrating the two businesses has presented a number of scale and scope challenges due to system complexity and the need to continue delivery of efficient and sustainable water management and service provision. Appendix H includes detailed information to support this section.

In addition to costs associated with addressing these challenges and administering the long-term integration, we have had to manage the short-term operational cost impacts of the integration within the revenue allowances approved by the ESC in the CWW 2018 and WW 2020 price reviews. We have successfully absorbed these costs on behalf of our customers during the current regulatory period, and customers previously served by WW have paid considerably less than they would have without integration.

With the majority of the costs related to integration behind us, we are now moving into a period of streamlining and refining our operations to deliver more benefits to our customers. We are proposing an annual average efficiency of 3% on controllable operating expenditure, made up of efficiencies from integration, business transformation and economies of scale and scope. This equates to a net efficiency of 0.19% per annum.

Changes to our operating expenditure over the current regulatory period (2018-19 to 2022-23) and our forecasts for the next regulatory period are grouped into four categories:

- **Costs associated with integrating CWW and WW:** These are the core operating costs needed to consolidate the systems, people and processes of the two entities to delivery integration and maintain CWW's and WW's level of service and water security.
- Costs associated with adding value and transforming our operating expenditure programs: integration provides a unique opportunity to transform our business to deliver services differently and meet legislative and regulatory requirements more efficiently, for example:
 - increased investment in **safety** transformation program and systems and processes to support our people in the field, which was identified as a key risk through the integration program.

- transforming **customer services** through COVID-19 pandemic and as we transform service delivery to increase digital transactions.
- maintaining, transforming and optimising our asset delivery processes (Asset Delivery Organisational Review) to lower long-term operating costs.
- exploring long-term solutions to manage **compliance** with our EPA licence and Drinking Water Standards
- \circ streamlining key **corporate functions** to the new business model.
- **Changes in obligations:** these are costs that are not directly related to integration and are due to regulatory, policy and legislative changes.
- **External cost drivers:** these are costs that are not directly related to integration but are driven by changes in our external operating environment that have resulted in additional costs across operations and maintenance, IT and energy.

We are using the skills and resources gained during integration to deliver a transformational program that will realise operating expenditure efficiencies through this price period and into the next.

This section sets out our current period performance, base year expenditure, proposed operating efficiency, step changes and non-controllable forecasts based on these four key program drivers.

This section discusses the difference between actual operating expenditure incurred over the current regulatory period and operating expenditure that was used by the ESC to develop prices in the 2018 CWW determination and 2020 WW determination. Combining the ESC's CWW and WW operating expenditure is not reflective of a notional GWW determination for the current regulatory period (2018 to 2024). GWW is not a simple aggregation of the two pre-existing businesses. The integration has fundamentally changed the way we conduct our operations.

In addition, neither the 2018 CWW determination nor the 2020 WW determination considered the cost impacts of integration. As such the operating expenditure associated with integration was not incorporated into CWW or WW prices over the regulatory period. Integration has affected our entire operating expenditure base and any comparison between historical determination forecasts of operating expenditure and actual outcomes needs to take this into consideration.

4.2.1 Current period performance

GWW has exceeded the CWW and WW determination allowances across the 2018-19 to 2022-23 regulatory period by \$71.5 million. The previous determination allowances were set for different businesses, facing different cost drivers and are not reflective of prudent and efficient expenditure for GWW. This is equivalent to a 7.9% increase and is slightly higher than what was observed in the 2023 price submissions of 5.8% overspend.^{ix} Controllable operating expenditure per connection has increased over the current period from \$326 in 2018-19 to \$341 in 2022-23. This is based on operating expenditure that excludes one-off adjustments in the 2022-23 year.

Operating expenditure over the regulatory period compared to CWW and WW determinations is shown in **Figure 5**. Changes to operating expenditure have been driven by integration, our transformation program and changes in obligations and non-integration cost drivers.

GWW experienced higher new connections growth than expected in the 2018 and 2020 determinations in the area serviced by WW. This resulted in additional spend to manage new customers including temporary asset solutions that can have higher operating expenditure and compliance challenges with sewage discharges heightened and additional operating cost to manage this.



Figure 5 Operating expenditure 2018-23 compared to determination allowances (\$million, 2023-24)

Current period performance: integration

Integration expenses are expenses associated with consolidating the two legacy businesses into one. These expenses are aimed at maintaining GWW's operational efficiency and services at a level consistent with that provided by CWW and WW. Integration expenses were not included in either the 2018 CWW or 2020 WW determinations and are all additional to those approved by the ESC.

These costs are mostly administrative in nature, such as consolidation of back-end systems. A review was completed during integration for several back-end systems (such as payroll, HR, finance) to choose the most fit-for-purpose system, import data and retire the unused system.

These expenses have resulted in efficiencies over the current period. Examples include savings that were achieved through conversion to a single executive and board and through the workforce rationalisation that occurred naturally through attrition over the current regulatory period.

Prior to the 2021 integration the average cost of services per user in WW was increasing, as shown in the recent 2018 and 2020 price submissions, consistent with capacity constraints and diseconomies of scale for the business. During this period capacity constraints meant that each additional customer triggered an increase in operating costs and ultimately a significant increase in capital expenditure. Delayed capital expenditure increased operational costs associated with managing infrastructure and supporting workarounds. This resulted in additional operating expenditure that GWW is still experiencing today.

The integration of CWW and WW was formalised by the acting Minister for Water in February 2021 through two ministerial determinations made under the *Water Act 1989* (*Vic*).[×] These ministerial determinations along with the announcement made by the Minster for Water in October 2020 placed obligations on the new entity (GWW) including that:

- all existing staff (executive and non-executive) would be transferred to the new entity
- all depots and offices would remain
- investment would be made to upgrade the Sunbury office
- an additional 50 staff would be based at the Sunbury office for at least three years including strong executive presence.

In total, GWW has invested \$23.0 million from 2020-21 to 2022-23 on integrating its businesses. The increase in costs has been offset by the significant \$9.2 million in integration-related efficiencies achieved by GWW. A summary of this is presented in **Table 15**. The integration costs and benefits incurred to date have not been passed onto customers.

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Opex	-	-	4.64	7.30	6.98*	4.10
Efficiencies achieved	-	-	-0.82	-2.27	-2.93	-3.16
Net opex	-	-	3.82	5.03	4.05	0.94

Table 15 Integration opex and efficiencies (\$million, 2023-24)

*Includes \$2.9m of non-recurrent integration expenses in 2022-23 as described in Section 4.2.2. After the removal of this non-recurrent item, the 2022-23 net opex is \$1.2m.

Current period performance: transformation

The transformation program includes those investments where GWW considered it optimal (efficient) in the long run to upgrade its operations, respond to regulatory requirements and maintain or improve service levels. Our transformation program is centred around opportunities to improve our service offering to customers while we invest in single systems and processes for the new entity.

We have identified five key transformation programs:

- safety uplift
- transforming customer services
- managing compliance
- increased focus on asset management
- streamlining corporate functions.

Refer to Appendix H for a detailed explanation of the above transformation programs. The total transformation operating expenditure identified over 2018-19 to 2023-24 is \$18.1 million, as shown in **Table 16**.

Table 16 Transformation opex (\$million, 2023-4)

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Opex	-	-	-	3.30	6.96	7.83

Current period performance: changes in obligations

Since 2018-19, GWW has experienced several changes in obligations. These are:

- First Nations and Traditional Owner engagement: GWW is required to engage with Traditional Owners, in particular around Action 4.2 from the *Central and Gippsland Region Sustainable Water Strategy*. This has come at a cost of <\$0.1 million. Additional costs have been identified as a step change in operating expenditure (Section 4.2.4).
- Payroll tax: in 2022-23, the Victorian Government increased payroll tax by 0.5% resulting in an additional \$0.5 million in operating expenditure.
- Superannuation guarantee: Superannuation increased gradually from 9.5% in 2018-19 to 2020-21 to 11% in 2023-24. This resulted in an \$2.4 million increase over the regulatory period.

Table 17 Changes in obligations opex (\$million, 2023-24)

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Opex	-	-	-	0.38	1.33	1.71

Current period performance: external cost drivers

Expenditure driven by external factors and not driven by the integration or changes in obligations over the regulatory period has been defined as expenditure outside of GWW's control and 'changes in cost drivers'. These are additional costs (above inflation) that we incurred to maintain service levels, where the activities undertaken were efficient and prudent.

The following key cost increases have impacted on our current period performance:

- Operations and maintenance costs: increase in unit rates and safety requirements have resulted in additional costs that GWW has managed over the current regulatory period. This has resulted in \$7.0 million above determination expenditure.
- Energy: compared to the 2018 and 2020 determinations, energy costs are lower overall. The base year, 2022-23, was abnormally low from a total energy cost of \$3.6 million lower than determination financial models.
- IT: observed increases in the cost and volume of licence fees. This has resulted in an increase in \$4.1 million above determination in 2022-23.
- Insurance: increase in premiums over the regulatory period driven by tightening in the insurance market and increased risk of natural disasters. This has resulted in an increase in \$3.6 million above determination in 2022-23.

 Chemicals: compared to the 2018 CWW determination and 2020 WW determination, chemical costs are significantly higher in 2022-23. The total cost increase was \$1.9 million, with \$0.3 million step change in 2021-22 allocated to our transformation program – compliance.

A summary is presented in **Table 18**.

Table 18 Changes to opex due to external cost drivers (\$million, 2023-24)

	2018-19	2019-20	2020-21	2021-22	2022-23
Opex	3.35	5.76	1.79	6.85	12.69

4.2.2 Base year operating expenditure

For the regulatory period ending 30 June 2028, the base year for our forecasts of controllable prescribed operating expenditure is 2022-23. The base year is our second complete year of operations as GWW and reflects a peak level of integration operating expenditure.

Consistent with the PREMO framework we have:

- clearly identified the controllable and non-controllable expenditure associated with our prescribed services
- adjusted the base year to remove non-recurrent activities and adjust for anticipated recurrent activities that are not captured in that year
- established the efficiency of the base year controllable opex.

Base year operating expenditure

In 2022-23, GWW's total operating expenditure was \$670.3 million. This total includes non-controllable expenditure, non-prescribed operating expenditure, revenue offsets and operating expenditure that is proposed to be capitalised under the regulatory framework.

To establish our base year controllable expenditure, we are proposing a total adjustment of \$460.6 million (as itemised in **Table 19**). In summary, this adjustment is comprised of:

- Regulatory capitalisation of -\$41.4 million: this relates to the capitalisation of statutory operating expenditure as the benefits of the related projects extending beyond one regulatory period. Refer to Section 4.3 for more details.
- Non-prescribed costs of -\$5.3 million: non-prescribed expenditures include expenditure associated with the collection of the Parks Charge on behalf of the Department of Energy, Environment and Climate Action (DEECA).
- Bad debts of -\$4.9 million: statutory accounts include bad debt as an expense; however, this is captured as a revenue offset in the regulatory forecast.
- Regulatory opex adjustment of +\$6.1 million: this is the only addition to our statutory accounts and reflects the cash paid for leases of land and property. These leases sit on our balance sheet as liabilities and are expensed through depreciation and interest on the income statement.

- Non-controllable costs of -\$409.2 million: this is all the bulk charges, licence fees and the environmental contribution levy paid for in 2022-23. The forecast for noncontrollable operating expenditure is completed separately and described in Section 4.2.6. Non-controllable operating expenditure.
- Non-recurrent expenditure of -\$5.9 million: the total one-off expenses in 2022-23, with over half of this due to one-off integration expenses, \$2.9 million.

The total prescribed, adjusted controllable operating expenditure for the base year is \$209.6 million.

Table 19 Base year opex (\$million, 2023-4)

Category	Item	2022-23		
Opex as per statutory ac	Opex as per statutory accounts			
Regulatory capitalisation	Billing and collections and other SaaS programs	-38.56		
	Capital delivery uplift (Asset Delivery Organisational Review)	-2.82		
Non-prescribed opex	Operating expenditure for third party invoicing	-5.32		
Bad debt	Revenue offset of bad debt	-4.93		
Regulatory adjustment	Operating leases	+6.08		
Opex as per regulatory a	ccounts	624.71		
Non-controllable opex	All bulk charges paid in 2022-23	-372.03		
	Licence fees and ECL	-37.18		
Controllable opex		215.49		
Non-recurrent expenditure	One-off integration expenses	-2.87		
	Preparation of the price submission	-1.09		
	Meter services contract review	-0.52		
	Labour cost adjustment	-0.08		
	Greater Melbourne Urban Water & System Strategy (GMUWSS) finalisation	-0.10		



Efficiency of the base year

Our adjusted base year is higher than the 2018 and 2020 determinations. GWW has removed non-recurrent operating expenditures. Over the regulatory period, we have sought to offset cost impacts through an increased focus on expenditure. Examples of this include:

- Annual corporate planning process: during the annual corporate planning process we complete a risk assessment and priority review of operating expenditure. This ensures that operating expenditure is spent on the right activities at the right time.
- Licence fee rationalisation: we frequently review our licence fee requirements, both if the software is still required and if it is still required by its users. This has enabled us to ensure that licence fees are only purchased and maintained for active users.
- State Purchasing Contract: we use the State Purchasing Contract for a number of external services, including professional advisory, energy and several IT products and services.
- Workforce Investment Review Panel committee: to ensure that our labour costs remain prudent and efficient, we review every vacant position and new position proposed across the business before it can be recruited for. This ensures that the benefit of duplicate roles is captured, positions are fully justified, staff can be redeployed, and that any new positions fit into our workforce plan.

The typical application of benchmarks to establish the efficiency of the base year is not possible. We are still optimising organisational structure, systems and processes and there are no comparable water businesses with similar services and operating environments who are undergoing similar structural reform to allow for meaningful likefor-like benchmarking.

Where possible, we have used benchmarks to identify where GWW will be in the future.

Integration efficiencies in the base year

Our base year includes \$4.1 million (\$7.0 million less \$2.9 million non-recurrent integration costs) of our ongoing costs as a result of consolidation. The largest components are alignment of Enterprise Agreements at a cost of \$1.8 million and finance system alignment at \$0.8 million.

This is mostly offset by efficiencies achieved in 2022-23 that are embedded in the base year. The additional efficiencies beyond this (2023-24 less 2022-23 efficiencies) are included in our efficiency forecast.

 Table 20 Integration opex and efficiencies (\$million, 2023-24)

	2020- 21	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26	2026- 27	2027- 28	10- year total
Opex	4.64	7.30	6.98	4.10	4.10	4.10	4.10	4.10	39.44
Efficiencies achieved	-0.82	-2.23	-2.93	-3.16	-4.10	-4.10	-4.62	-4.62	-26.57
Net opex	3.82	5.07	4.05	0.94	0.00	0.00	-0.51	-0.51	12.87
Net integration opex in the base (net opex less non-recurring)			1.19						
Additional integration opex in the forecast				-	-	-	-	-	
Integration efficiency from the base (new efficiencies and costs removed)				-0.23	-1.17	-1.17	-1.69	-1.69	

Base year comparison to determination

Our 2022-23 recurrent operating expenditure exceeded the CWW and WW determinations by approximately \$25.5 million plus \$5.9 million in one-off adjustments (non-recurrent items and capitalised items) from the base year.

The additional expenditure has primarily been driven by our directive to integration, transformation programs, changes in obligations, and external cost drivers. This comprises approximately 87% of the above base year ongoing expenditure. The other 12% of above determination costs are due to movements in labour.

The above-determination labour costs in total are \$5.7 million, almost half of which is captured in the integration, transformation programs and changes in obligations. The remaining amount, \$3.0 million, is a result of:

- a need to increase internal labour to increase corporate knowledge and retention through the creation of corporate artifacts
- expenditure on strategic planning activities as a result of integration that will deliver increased customer value over the long term through more coordinated water resource, engagement, asset planning, technology and customer services
- increased corporate services support for the growing recruitment needs and staff numbers.

Table 21 provides a summary of 99% of above determination operating costs. The remainder 1% is due to other small movements across the business.

 Table 21 Reconciliation of above determination ongoing operating expenditure (\$million, 2023-24)

Category	2022-23 above determination ongoing opex
Integration	1.19
Transformation - Asset	1.19
Transformation - Compliance	3.54
Transformation - Corporate	0.76
Transformation - Customer	1.17
Transformation – Safety	0.29
Changes in obligations	1.33
External cost drivers	12.69
Labour movements	3.00
Total	25.16

4.2.3 Operating expenditure baseline forecast

The baseline forecast is an extrapolation of the base year through the application of an efficiency and growth.

Consistent with recent precedent set by the ESC's determinations for a large number of Victorian water businesses in the 2023 PREMO Price Review, GWW has adopted connections growth as the basis for its proposed growth factor. Our proposed efficiency factor has been forecast based on our expectations of the efficiencies our integration and transformation programs will deliver and the efficiencies that we expect to deliver through the realisation of economies of scale and scope over the regulatory period.

Growth factor

GWW is a newly integrated business with limited historical data on actual performance. While data exists for CWW and WW, it is unclear how these historical growth rates are relatable to the operating expenditure associated with the new integrated business. Given the historical data does not provide a reliable basis for considering the historical impact of growth on operating expenditure, GWW proposes to adopt the ESC's established regulatory approach of using water connections growth rate as the growth factor. While sewer connections have been higher in recent years, typically it is water properties being connected to sewer rather than sewer-only properties.

The growth rate proposed is based on the Victoria in Future 2022 forecast that has been used to forecast connections in Section 7.6.

The growth forecasts used are shown in **Table 22**.

Table 22 Growth forecasts

	2023-24	2024-25	2025-26	2026-27	2027-28	Average (4 years)
Proposed	3.29%	3.02%	3.11%	2.58%	2.54%	2.81%

Efficiency factor

GWW proposes an average annual compounding efficiency factor of 3.0%. Our proposal is based on bottom-up accounting of the efficiencies we expect to realise through our integration and transformation programs in addition to broader efficiencies we expect to achieve over time through economies of scale and scope.

Our efficiency forecast captures the following components (the annual profile of efficiency saving is outlined in **Table 23**):

- **Identified integration efficiencies:** efficiencies we will generate through our programs aimed at consolidating our people, systems and processes. They build on the efficiencies delivered from integration expenditure in 2022-23 and 2023-24, including an intermediate year efficiency of 2% that is consistent with the proposals in the 2018 and 2020 price submissions. We have identified \$5.72 million of efficiencies related to integration over the regulatory period.
- **Identified transformation efficiencies**: efficiencies we have identified and quantified for our transformation program. They include:
 - uplift in **safety** investment and changes to asset construction through streamlining processes and procedures, and increases in remote meter reading.
 - working towards improved customer services through the COVID-19 pandemic and as we integrate and transform our service delivery through increased e-billing and self-serve.
 - investment in permanent solutions to manage compliance and reduce operating expenditure on incidents and management of non-compliance
 - investing in our assets and developing consistent **asset management** processes
 - streamlining key **corporate functions**.

We have identified \$23.2 million of savings from business transformation over the regulatory period.

 Unidentified transformation efficiency target: as the transformation and integration programs progress, there are unquantified and/or unidentified efficiencies that can be delivered. We have proposed an efficiency target to address these and deliver the best outcomes for our customers. We are targeting an

additional \$17.4 million in efficiencies from transformations that are yet to be identified.

• **Residual (economies of scale and scope):** efficiencies that can be delivered through economies of scale and scope. This is equivalent to a standard business under the PREMO framework of 1.4% efficiency.

	2023-24	2024-25	2025-26	2026-27	2027-28	Average (4 years)
Identified integration efficiencies	0.23	1.17	1.17	1.69	1.69	
Identified transformation efficiencies	1.25	4.43	5.53	6.62	6.66	
Unidentified transformation efficiency target	-	0.98	4.00	5.36	7.05	
Residual (economies of scale and scope)	2.73	5.80	9.02	12.35	15.79	
Total efficiency	4.19	12.39	19.73	26.02	31.19	
Efficiency %	2.00%	3.80%	3.30%	2.75%	2.15%	3.00%
Net efficiency % (efficiency less growth)	-1.29%	0.77%	0.19%	0.17%	-0.39%	0.19%

Table 23 Efficiency forecasts compared to 2022-23 (\$million, 2023-24)

Key input cost assumptions

The operating expenditure forecast for each of the integration, transformation and residual expenditures in our baseline is underpinned by five key cost categories:

- Energy: forecast energy costs are expected to grow at a compound annual growth rate of 3.6% in real terms over 2023-24 to 2027-28. This is partially driven by forecast energy input costs as well as increases in consumption.
- Chemicals: chemical costs are increasing across the period at 3.5% per annum, in real terms, on average. This is driven by increases in customer connections in our service area that has its own treatment plants.
- Labour: forecast labour costs will decline marginally over the regulatory period despite increases in superannuation and payroll tax expenses that we are not

proposing to pass onto customers and will be achieved through efficiencies in our labour costs.

- IT: IT costs excluding labour (internal and external) costs are forecast to increase due to the increased cost in meeting new obligations (*Security of Critical Infrastructure Act 2018 (Cth)* (SOCI Act) requirements) and the new billing and collections system going live. These are offset by efficiencies that will be achieved for IT only.
- Field maintenance: we are not proposing any increases in operations and maintenance costs outside of inflation, and as such cost per connection is expected to decline over the period.

Collectively, these five cost assumptions comprise nearly three-quarters of our operating expenditure forecast.

	2023-24	2024-25	2025-26	2026-27	2027-28	Total (4 years)
Energy	6.70	7.99	7.89	7.43	7.71	31.03
Chemicals	3.72	3.89	4.04	4.15	4.27	16.35
Labour	78.97	78.36	78.21	78.07	78.07	312.72
IT	18.71	20.13	20.35	20.47	20.58	81.52
Field maintenance	49.16	46.79	46.80	46.80	46.80	187.20
Total	157.27	157.16	157.29	156.93	157.40	628.82
% of proposed opex	72.54%	72.03%	71.98%	71.66%	71.42%	71.77%

 Table 24 Key input costs forecasts (\$million, 2023-24)

4.2.4 Operating expenditure baseline adjustments

The total baseline adjustment proposed is \$34.5 million over the four-year regulatory period. The level of proposed baseline adjustment reflects changes in:

- obligations and policy requirements: First Nations and Traditional Owner (\$4.0 million)
- engagement and expenditure to meet the new SOCI Act requirements (\$4.5 million)
- incremental operating expenditure resulting from infrastructure investment (\$5.0 million)
- incremental operating expenditure associated with the new billing and collections system (\$15.8 million)

 additional costs associated with customer hardship programs as supported by customerss (\$5.2 million)

GWW is not proposing to pass on additional costs associated with changes in the payroll tax or superannuation guarantee. We are proposing to recover these additional costs through our workforce optimisation plan.

These baseline adjustments are presented in **Table 25**.

 Table 25 Baseline adjustments forecasts (\$million, 2023-24)

	2023-24	2024-25	2025-26	2026-27	2027-28	Total (4 years)
First Nations and Traditional Owner	0.31	0.62	0.92	1.22	1.22	3.97
Security of Critical Infrastructure	0.68	0.99	1.09	1.20	1.20	4.47
Infrastructure investment	0.78	0.80	1.03	1.38	1.88	5.08
New billing and collections system	1.40	3.79	3.90	3.99	4.09	15.77
Customer hardship program	1.30	1.30	1.30	1.30	1.30	5.20
Total	4.47	7.49	8.23	9.08	9.69	34.49

4.2.5 Controllable operating expenditure proposal

GWW's total controllable operating expenditure for the four-year period ending 2027-28 is \$876.1 million.

Our proposal provides for a material decline in operating expenditure per connection from \$341 in 2022-23 to \$310 in 2027-28.

 Table 26 Forecast controllable operating expenditure (\$million, 2023-24)

	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Average / Total (4 years)
Growth		3.29%	3.03%	3.11%	2.58%	2.54%	2.81%
Efficiency		2.00%	3.80%	3.30%	2.75%	2.15%	3.00%

	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Average / Total (4 years)
Net Efficiency		-1.29%	0.77%	0.19%	0.17%	-0.39%	0.19%
Base	209.63						
Trend		212.34	210.69	210.29	209.92	210.73	841.63
Step		4.47	7.49	8.23	9.08	9.69	34.49
Total	209.63	216.81	218.18	218.52	219.00	220.42	876.12
Total (\$ per connection)	341	341	333	324	316	310	

4.2.6 Non-controllable operating expenditure

We source over 90% of our water from our bulk suppliers, Melbourne Water and Southern Rural Water. Melbourne Water treats over 85% of our sewage. Along with bulk costs, we also pay licence fees and levies to government authorities. Over the next four years, we are forecast to pay \$1,644.8 million in non-controllable operating expenditure. This accounts for two-thirds of total operating expenditure.

 Table 27 Non-controllable operating expenditure (\$million, 2023-24)

	2023- 24	2024- 25	2025- 26	2026- 27	2027- 28	Total (4 years)
Melbourne Water – water	257.89	256.53	255.41	255.78	257.10	1,024.82
Melbourne Water – sewerage	112.61	115.92	119.64	119.78	120.10	475.45
Melbourne Water – recycled water	0.73	0.73	0.73	0.73	0.73	2.92
Southern Rural Water – water	2.58	2.59	2.60	2.66	2.71	10.56
Goulburn-Murray Water – Goulburn and Murray water entitlements	0.47	0.42	0.40	0.40	0.39	1.61
Barwon Water – access to Melbourne Geelong Pipeline	0.32	0.32	0.32	0.32	0.32	1.30

	2023- 24	2024- 25	2025- 26	2026- 27	2027- 28	Total (4 years)
Licence fees – Essential Services Commission	0.56	0.56	0.56	0.56	0.56	2.26
Licence fees – Department of Health	0.19	0.19	0.19	0.19	0.19	0.76
Licence fees – Environment Protection Authority	0.14	0.14	0.14	0.14	0.14	0.54
Environmental Contribution Levy	33.91	32.77	31.66	30.59	29.55	124.56
Total	409.41	410.17	411.65	411.16	411.80	1,644.78

Melbourne Water bulk charges

GWW pays bulk charges to Melbourne Water for treatment and transport of water and sewage. This is our largest single operating expenditure cost, accounting for 60% of total operating expenditure. Melbourne Water has provided us with a forecast of prices for the regulatory period.

GWW also pays Melbourne Water for the supply of Class A recycled water. This water is further treated at the West Werribee Salt Reduction Plant to lower its salt content.

These costs are forecast to grow in line with GWW's demand for bulk services and, in the case of water and sewage, in line with the price paths set out in Melbourne Water's 2021 determination, with stable prices assumed thereafter. We have assumed that current negotiated rates for bulk recycled water will remain stable.

Southern Rural Water bulk water charges

GWW sources raw water from storages owned and operated by Southern Rural Water. We pay an annual fixed fee regardless of the volume of water drawn. Southern Rural Water provided us with a forecast annual fixed fee from its 2023 price determination.

Goulburn-Murray Water bulk water charges

GWW has a total of 30.5 GL of entitlements within the Murray and Goulburn systems. We will continue to pay bulk entitlement storage fees to Goulburn-Murray Water during the next regulatory period. As Goulburn-Murray Water's price review is running concurrently to ours, we have based our forecast on data provided to us on 18 July 2023.

Prior to the final determination, we will work with the Goulburn-Murray Water and the ESC to finalise this forecast.

Access to Melbourne Geelong Pipeline

GWW entered into an access arrangement with Barwon Water to use the Melbourne Geelong Pipeline. This pipeline has been important to ensure reliability of water in the south-western part of our network.

Licence fees

We pay licence fees to three government agencies as part of our operating licence. These are paid to Department of Human Services (Drinking Water), Environment Protection Authority (EPA Licence), and Essential Services Commission (ESC licence). These are based on the costs incurred in 2022-23 and are consistent with the financial template.

We allocate drinking water to our water costs, EPA licence to sewerage and recycled water, and the ESC licence fee is across all products.

Environmental Contribution Levy

GWW pays the Environmental Contribution Levy to DEECA. This is a nominal cost of \$34 million per year and has been deflated by the inflation assumptions in our financial template. These are based on the costs incurred in 2022-23 and are consistent with the financial template.

4.2.7 Total operating expenditure

Annual controllable operating expenditure for the regulatory period will increase from \$218.18 million in 2024-25 to \$220.42 in 2027-28, with a total operating expenditure for the four year regulatory period of \$876.12 million. Total non-controllable operating expenditure for the four year regulatory period is \$1,644.78 million, resulting in a total controllable operating expenditure of \$2,520.90 over the regulatory period. The year-by-year breakdown of operating expenditure for the regulatory period is outlined in **Table 28**.

	2023-24	2024-25	2025-26	2026-27	2027-28	Total (4 years)
Controllable	216.81	218.18	218.52	219.00	220.42	876.12
Non-controllable	409.41	410.17	411.65	411.16	411.80	1,644.78
Total	626.21	628.35	630.17	630.16	632.22	2,520.90

 Table 28 Total operating expenditure forecast (\$million, 2023-24)

Supporting documents for operating expenditure:

- Energy Forecast Expenditure
- Step Change Expenditure Security of Critical Infrastructure
- Step Change Expenditure Traditional Owner
- Step Change Expenditure Hardship Program
Investment and expenditure to deliver customer outcomes

OPEX Step Changes workbook

4.3 Capitalisation of operating expenditure

We propose to capitalise operating expenditure related to two major projects as the benefits of the related projects extend beyond one regulatory period. These projects are:

- Information Technology (SaaS and other discrete IT projects): This relates to our major IT projects:
 - A new billing and collections system (Program Platypus) to replace the former City West Water and former Western Water existing core billing and collections systems with a single cloud-based solution (on a Software as a Service basis, 'SaaS'). This new system will enable GWW to better serve its customers and create efficiencies over the continued operation of the existing legacy systems. Program Platypus commenced in March 2020 and will conclude in 2023-24.
 - Other one-off discrete IT projects for 2022-23 which include large irregular operating costs that are not incurred every regulatory pricing period but provide a customer benefit over two or more regulatory periods. This includes billing and collection satellite projects that require further configuration and customisation of services.
- Asset Delivery Organisational Review (ADOR program): a program that will change how we plan, design and build infrastructure that will enable GWW to deliver on its capital program in a prudent and efficient manner.

The accounting treatment for the expenditure associated with these projects would see it expensed and not capitalised. However, we are proposing to capitalise a portion (i.e., excluding operating costs that are ongoing such as licence fees and support services) of the operating expenses for the above projects, based on the following rationale:

- Our new billing and collections system (Platypus) and the other discrete IT projects are expected to have a life and provide benefits to GWW and its customers over a period greater than one year. This would align the cost recovery of the program with the time period of the benefits.
- Consistent with ESC's approach of forecasting operating expenditure as to comprise of the recurring controllable costs (Box 3.2 of 2024 Guidance Paper) as Program Platypus is lumpy and once-off.
- Consistent with ESC's 2024 Guidance Paper (pages 34-35), where businesses may propose to capitalise certain statutory operating expense:
 - `in the case of a major IT-related project, the development and implementation costs of a new system might be justified as capital expenditure and recovered over the expected life of the new system'
 - 'large irregular operating costs that are not incurred every regulatory pricing period but provide a customer benefit over two or more regulatory periods'.

A detailed overview of the capitalisation of these two major projects along with the regulatory treatment in the ESC's pricing template is provided in Appendix I.

5. Stable and declining bills during the regulatory period

5.1 Summary of bill impacts

Overall, the average residential customer will receive a 1.0% real bill decrease in the first year of the next period, followed by a year-on-year real bill increase of 0.1% per annum excluding any future desalination water order costs.

Owner occupier customers in the central region will see an initial decline of \$11 and then a small annual increase with bills at the end of the regulatory period \$9 lower than current. Tenant customer bills in the central region will reduce by \$20 over the period.

In the western region, owner occupiers will see a bill decrease of \$47 over the regulatory period. Western region tenant customers will see an increase of \$26 from \$348 to \$374, representing a shift towards higher variable charges and lower fixed charges to more closely align tariffs with the central region. An increase in the funding for our customer support program will ensure that we are able to support any impacted tenant customers in the western region.

Non-residential customer bills will remain stable over the period, with a small decrease for small business customers in central and western regions, medium business customers in the western region and a small increase for medium-sized businesses in the central region.

Residential bills

Table 29 and **Table 30** show a sample of residential and business customers bills proposed for the next regulatory period. Customers are assumed to be connected to water and sewerage services.

 Table 29 Proposed residential bills – 150 kilolitres per annum (\$, 2023-24), excluding pass through adjustments and inflation

Region	Customer segment	2023-24	2024-25	2025-26	2026-27	2027-28
Overall	Owner occupier	\$1,021	\$1,010	\$1,011	\$1,011	\$1,012
	% change		-1.0%	0.1%	0.1%	0.1%
	Tenant	\$504	\$487	\$488	\$489	\$490
	% change		-3.3%	0.2%	0.2%	0.2%
Central	Owner occupier	\$1,007	\$996	\$999	\$1,002	\$1,005
	% change		-1.1%	0.3%	0.3%	0.3%
	Tenant	\$531	\$511	\$511	\$511	\$511

Stable and declining bills during the regulatory period

Region	Customer segment	2023-24	2024-25	2025-26	2026-27	2027-28
	% change		-3.9%	0.0%	0.0%	0.0%
Western	Owner occupier	\$1,099	\$1,092	\$1,079	\$1,065	\$1,052
	% change		-0.7%	-1.2%	-1.2%	-1.3%
	Tenant	\$348	\$355	\$361	\$368	\$374
	% change		1.9%	1.8%	1.8%	1.8%

Business (non-residential) bills

Table 30 Proposed business customers bills (\$, 2023-24), excluding pass through adjustments and inflation

Region	Customer segment	2023-24	2024-25	2025-26	2026-27	2027-28
Overall	Small business (100kL)	\$1,278	\$1,285	\$1,282	\$1,278	\$1,275
	% change		0.5%	-0.3%	-0.3%	-0.3%
	Medium business (1000kL)	\$5,546	\$5,573	\$5,570	\$5,566	\$5,563
	% change		0.5%	-0.1%	-0.1%	-0.1%
Central	Small business (100kL)	\$1,297	\$1,305	\$1,302	\$1,299	\$1,296
	% change		0.6%	-0.2%	-0.2%	-0.2%
	Medium business (1000kL)	\$5,694	\$5,722	\$5,719	\$5,716	\$5,714
	% change		0.5%	0.0%	0.0%	0.0%
Western	Small business (100kL)	\$1,057	\$1,056	\$1,046	\$1,036	\$1,026
	% change		-0.1%	-0.9%	-0.9%	-1.0%
	Medium business (1000kL)	\$3,812	\$3,830	\$3,820	\$3,811	\$3,801
	% change		0.5%	-0.3%	-0.3%	-0.3%

Tenant bill rebate

During the 2020 price submission, WW applied a rebate to residential tenants' bills. This rebate has been reduced over time and will continue to decrease by approximately \$15 per annum until it is \$0 in 2027-28. GWW has been absorbing the costs associated with this rebate and will continue to do so until it is removed completely.

Table 31 Rebate value for previous western tenant customers (\$, nominal)

	2023-24	2024-25	2025-26	2026-27	2027-28
Rebate amount	60.30	45.23	30.16	15.09	0.00

Weighting our bills

Given the two different pricing regions, we have used customer numbers shown in **Table 32** to derive weighted average GWW bills for the 2025-2028 period.

Table 32 Customer numbers for central and western regions

ESC BED1 water customers (as at 30 June 2023)	Central	Western	Total
Residential	483,492	84,775	568,267
Business	43,627	3,725	47,352
Total	527,119	88,500	615,619

Customers told us at all stages of our engagement that affordability is important and no matter where customers live, they should experience a similar price for a similar service.

This section describes our proposed tariff reform and tariffs.

Summary

- Average residential customer bills will decrease by 1.0% and remain stable over the regulatory period.
- Distinct central and western pricing areas will continue throughout the period.
- Our tariff strategy will deliver transition to similar prices for similar services across the pricing areas over time.
- The proposed tariff reform will:
- remove the residential sewage disposal charge for central customers in 2024-25
- introduce residential potable water volumetric tariffs conditional on service connection availability for central customers in 2024-25
- remove the third step charge of the residential volumetric potable water tariff for western customers in 2024-25.

6.1 Our tariff strategy

GWW has operated under unique circumstances with two distinct determinations for two regions in our service area. Customers receive different tariff structures in each region and, subsequently, different prices and bills.

GWW mitigated some of these differences through the application of our tariff basket, limiting the annual divergence of similar charges across the region. This was guided by our tariff strategy of providing a similar price for a similar service across our service area and making sensible alignments within the framework of the existing determinations.

Through the current period we focused on delivering average customer bills that were lower than the bills customers would have received under the price paths approved in the CWW and WW determinations. GWW has absorbed the revenue shortfall from these lower prices, ensuring customers were better off as we integrated the business.

This price submission is our opportunity to deliver and stage key tariff reform under a new GWW determination. Our proposals align with our long-term tariff strategy, customer preferences of similar prices for similar services and customer views on tariff structures across our service area.

6.1.1 We want all customers to experience a similar level of service at a fair price

For our customers, we expect that, whether you live in the CBD or in Melton, you will experience a similar level of service for a fair and similar price. We will deliver this by simplifying tariff structures and transitioning prices across our service region over time while maintaining distinct central and western pricing zones during the period.

To enact our long-term tariff strategy, we propose to undertake the following tariff structure reform:

- Remove the residential sewage disposal (as committed to in CWW's 2018 price submission) and introduce a residential water volumetric tariff conditional on service connection availability for central customers in 2024-25.
- Remove the third step charge of the residential volumetric potable water tariff for western customers in 2024-25.

These proposed structural changes reflect the preferences of our customers and will simplify key components of our residential tariff structures across our service region during the regulatory period. We will continue to investigate and engage with our customers on other avenues for alignment of tariff structures in the following period.

6.2 Our core services

Our core services include potable water, sewerage, recycled water and trade waste services for residential and business (non-residential) customers.

6.2.1 Residential services

A summary of our current and proposed billing practices for residential customers in the central and western areas from 1 July 2024 can be found in the summary billing practice supporting document.

Our proposed tariff reform for residential charges

How we engaged with customers

We explored four key tariff questions with our customers in late 2021, as part of a joint metropolitan water business tariff customer research with South East Water and Yarra Valley Water: ^{xi}

- How much of the water/wastewater charges should be fixed and how much should be based on usage?
- Should a household pay the same price for every kilolitre of water they use or should the price increase in steps?
- Should the sewage disposal charge be removed and spread across other charges?
- Should the water service charge be related to the size of the water meter at the property?

These questions were explored in five focus groups for each water business, with approximately 44 GWW customers participating. These customers were representative of the community and the focus groups were segmented by income status, political views and a group for financially vulnerable customers.

Fixed and variable ratio

What we heard

On the current fixed to variable ratio of tariffs, three of the five GWW focus groups including the financially vulnerable group wanted 'slightly more' variable tariffs, with the remaining two groups wanting 'somewhat more' variable tariffs (somewhat being larger than slightly). Most participants justified their choice for more variable tariffs as it was perceived to encourage water conservation and reflected more of a user pays system with greater control over their bills. However, across the focus groups, some customers recognised that a more variable rate directly impacted renters and opted to maintain the status quo.

Our proposal

Existing fixed-variable ratios are different between the two regions in our service area, with the western region having a much higher fixed component. Our proposed tariff strategy is to align charges over time, with the proportion of variable relative to fixed increasing in the western region. This will better align with the existing fixed to variable balance across the central region. Given the unique circumstance of our different fixed-variable balance, we propose to hold off on any changes for the central region until charges are more closely aligned.

Water usage price steps

What we heard

On the number of steps in the water usage charge, three of the five GWW focus groups preferred a three-step tariff and two groups preferred a two-step tariff. We found that customer preferences were mixed across the focus groups and the financially vulnerable group preferred a two-step tariff. This group, and several participants across the other groups, were more aware of the unfair impact of the three-step tariff on large households that may be efficient with water use per person, but total household usage enters the higher priced steps. This sentiment has come through from participants across several stages of our broader engagement program and is regularly expressed to our customer service team.

Our proposal

The existing number of water usage steps differs across the regions in our service area. We propose to reduce the number of potable water usage steps from three to two in the western region in line with the existing two steps in the central region. On balance, direct feedback from customers through our engagement, particularly those in vulnerable groups, and broader feedback recognises the impact of three steps on large families and supports our proposal. A two-step usage tariff across the service region will continue to promote efficient water use and is better aligned with the ESC's position on water usage steps. Two-step usage tariffs will apply from 2024-25.

Sewage disposal charge

What we heard

On the removal of the sewage disposal charge in the central region, four of five groups chose to remove the charge and recover the revenue through other charges. We found that customers wanted to abolish the charge as it was complex and difficult to understand and to `simplify' their bill, believing `accuracy' will enable them to better `control' their bills.

Our proposal

We propose to combine the residential water usage and sewage disposal charges into a two-step potable water usage tariff that is conditional on the type of service connections available to the customer in the central region. For example, customers connected to both water and sewerage services will be charged this new combined two-step potable water usage in the central region. For customers who only have a water service connection and no sewerage connection available, these customers will pay a lower set of two-step potable water usage tariffs. This will apply from 2024-25.

There is currently no sewage disposal charge in the western region. Removing it in the central region will bring consistency across Melbourne following the removal of sewage disposal charges by Yarra Valley Water and South East Water in the 2023 price review. We also acknowledge the ESC's position on removal of sewer disposal charges in our guidance paper.

Meter-based charging

What we heard

On the introduction of meter-based charging in the central region, all five groups supported a water service charge that relates to the size of the meter. Similarly, across all questions, customers often based this on user pays principles.

Our proposal

We have not proposed meter-based charging for the central region as part of this price submission. The current meter-based charging structure will continue in the western region for this period.

We investigated the feasibility of implementing meter-based charging in the central region, however further investigation is needed to understand the impact of the change on customers and the business before proposing any reform. The new billing system

(being implemented as part of Program Platypus) has meter-based charging capability, which we will explore with our customers over the following regulatory period.

Assessment against WIRO and ESC principles

Our proposal to remove the sewage disposal charge for central residential customers is consistent with the ESC's 2024 water price review guidance paper, which considers variable sewerage tariffs difficult to understand and favours proposals for a single fixed charge for retail sewage disposal for residential customers.^{xii} This approach is also consistent with current metropolitan businesses' charging practice.

Our proposal to reduce the number of tiers for the western region is in line with the ESC's preference for a single volumetric charge for water services on efficiency grounds. x^{xiii}

We have assessed both proposals against the Water Industry Regulatory Order (WIRO). The proposed tariff better meets each pricing principle, as outlined in **Table 33**.

WIRO pricing principle	How the new tariff structure meets WIRO pricing principles					
	Remove SDC and introduce new water usage charges conditional of connection	Drop step 3 for western customers				
11(d) (i) enable customers or potential customers of the regulated entity to easily understand the prices charged by the regulated entity for prescribed services or the manner in which such prices are calculated,	Customers and the ESC have indicated that the SDC is difficult to understand, and the way it is currently calculated is not transparent.	We consider reducing the number of steps to 2 from 3 for customers in the western region is easy for customers to understand as it is a simplification of the existing 2-step tariff structure.				
determined or otherwise regulated;	Removing the SDC will enable customers to understand their water usage charges better.	We consider the alignment of the number of steps across the region to simplify any differences between regions and provides for easier explanation of charges levied across the region as a whole.				
11(d) (ii) provide signals about the efficient costs of providing prescribed services to customers (either collectively or to an individual customer or class of customers) while avoiding price shocks where possible; and	 We consider the removal of the SDC: provides the true signal of using water (and the cost to treat what goes down the drain) avoids price shock as customers already pay sewerage usage when moving to new water usage charge 	We consider the removal of the third step provides improved price signals to the cost of providing services to customers, bringing the structure closed to the ESC's efficiency preference. This proposal avoids price shocks as step 3 volume customers will now be charged a lower price for the same volume of water – with				

Table 33 Assessment against Water Industry Regulatory Order principles

WIRO pricing principle	How the new tariff structure meets WIRO pricing principles					
	• proposed prices net out the impact for customers.	large households benefiting from the removal the most.				
11(d) (iii) take into account the interests of customers of the regulated entity, including low income and vulnerable customers.	Removal of the SDC was supported by low income customers but was not supported by vulnerable customers in the focus group due to its potential impact on large households in the bill simulator.	Removal of step 3 received mixed support from low income and vulnerable customers, with low income customers opting for 3 step tariffs and financially vulnerable customers opting for a 2 step tariff driven by equity concerns for large families.				

Bill impacts from tariff reform

The figures below present average owner occupier and tenant bills in the central region before and after removing the sewage disposal charge. Both owner occupiers and tenants with an existing water and sewerage connection will see their bills remain stable or falling.



Figure 6 Average owner occupier bill with water and sewer connection - 150kL (central) (\$, 2023-24)



Figure 7 Average tenant bill with water and sewer connection - 150kL (central) (\$, 2023-24)

For customers with only a water connection, owner occupiers and tenants will have no significant impact to their bill. We have implemented our tariff reform to ensure that these customers, albeit a marginal group, see no significant impact to their bills.



Figure 8 Average owner occupier bill with only a water connection - 150kL (central) (\$, 2023-24)





Residential tariffs

Table 34 and **Table 35** show our proposed residential water and sewerage tariffs and prices for the next regulatory period.

 Table 34 Proposed residential water and sewerage tariffs and prices – central (\$, 2023-24)

Central region	Proposed price movement						
	Unit	2023-24	2024-25	2025-26	2026-27	2027-28	
Residential water tariff							
Fixed potable water prices							
Water network fee	Per annum	\$206.40	\$212.59	0.00%	0.00%	0.00%	
Volumetric potable water prices	5						
Price step 1 (0-440 litres/day)	Per kL	\$2.9499	N/A	N/A	N/A	N/A	
Price step 2 (441+ litres/day)	Per kL	\$3.4722	N/A	N/A	N/A	N/A	
Volumetric potable water prices	s (for custom	ers receivi	ng both wa	ater and se	ewerage se	ervices)	
Price step 1 (0-440 litres/day)	Per kL	N/A	\$3.3945	0.00%	0.00%	0.00%	
Price step 2 (441+ litres/day)	Per kL	N/A	\$3.8895	0.00%	0.00%	0.00%	
Volumetric potable water prices	s (for custom	ers receivi	ng only wa	iter service	es)		
Price step 1 (0-440 litres/day)	Per kL	N/A	\$2.9499	0.00%	0.00%	0.00%	
Price step 2 (441+ litres/day)	Per kL	N/A	\$3.4661	0.00%	0.00%	0.00%	
Residential sewerage tariff				•			
Fixed sewerage prices							
Sewerage network fee	Per annum	\$269.56	\$272.59	1.11%	1.10%	1.09%	

Central region Proposed price movement									
Volumetric sewerage prices									
Sewerage disposal fee	Per kL	\$0.7898	N/A	N/A	N/A	N/A			
Residential recycled water (Class A) tariff									
Fixed recycled water prices									
Recycled water network fee	Per annum	\$35.92	\$38.12	5.77%	5.46%	5.18%			
Volumetric recycled water prices	5								
Recycled water usage fee	Per kL	\$2.5074	\$2.4994	-0.32%	-0.32%	-0.32%			
Other tariffs									
Private fire service connections									
Private fire service connections	Per connection	\$119.96	\$123.56	0.00%	0.00%	0.00%			

 Table 35 Proposed residential water and sewerage tariffs and prices – western (\$, 2023-24)

Western region	Proposed price movement					
	Unit	2023-24	2024-25	2025-26	2026-27	2027-28
Residential water tariff						
Fixed potable water prices						
Water network fee – 20 mm	Per annum	\$206.37	\$212.56	0.00%	0.00%	0.00%
Water network fee – 25 mm	Per annum	\$340.18	\$332.13	0.00%	0.00%	0.00%
Water network fee – 32 mm	Per annum	\$577.47	\$544.16	0.00%	0.00%	0.00%

Western region			Proposed pr	ice moven	nent						
Water network fee – 40 mm	Per annum	\$920.06	\$850.25	0.00%	0.00%	0.00%					
Water network fee – 50 mm	Per annum	\$1,455.33	\$1,328.51	0.00%	0.00%	0.00%					
Water network fee – 80 mm	Per annum	\$3,774.79	\$3,400.99	0.00%	0.00%	0.00%					
Water network fee – 100 mm	Per annum	\$5,915.81	\$5,314.05	0.00%	0.00%	0.00%					
Water network fee – 150 mm	Per annum	\$13,349.98	\$11,956.62	0.00%	0.00%	0.00%					
Volumetric potable water price	S										
Price step 1 (0-440 litres/day)	Per kL	\$2.3071	\$2.3511	1.87%	1.84%	1.81%					
Price step 2 (441-880 litres/day). ^{xiv}	Per kL	\$3.0611	\$3.0778	0.54%	0.54%	0.54%					
Price step 3 (881+ litres/day) ^{xiv}	Per kL	\$3.9364	N/A	N/A	N/A	N/A					
Residential sewerage tariff											
Fixed sewerage prices											
Sewerage network fee	Per annum	\$544.54	\$524.61	-3.80%	-3.95%	-4.11%					
Residential and non-residentia	Residential and non-residential recycled water (Class A) tariff										
Fixed recycled water prices											
Recycled water network fee – 20 mm	Per annum	\$131.44	\$123.02	-6.84%	-7.34%	-7.92%					
Recycled water network fee – 25 mm	Per annum	\$205.50	\$192.34	-6.84%	-7.34%	-7.93%					

Western region	stern region				nent			
Recycled water network fee – 32 mm	Per annum	\$336.68	\$315.12	-6.84%	-7.34%	-7.93%		
Recycled water network fee – 40 mm	Per annum	\$526.07	\$492.39	-6.84%	-7.34%	-7.93%		
Recycled water network fee – 50 mm	Per annum	\$822.05	\$769.41	-6.84%	-7.34%	-7.93%		
Recycled water network fee – 80 mm	Per annum	\$2,104.63	\$1,969.85	-6.84%	-7.34%	-7.93%		
Recycled water network fee – 100 mm	Per annum	\$3,288.54	\$3,077.94	-6.84%	-7.34%	-7.93%		
Recycled water network fee – 150 mm	Per annum	\$7,399.32	\$6,925.45	-6.84%	-7.34%	-7.93%		
Volumetric recycled water pric	olumetric recycled water prices							
Recycled water usage fee	Per kL	\$1.9606	\$2.0134	2.62%	2.55%	2.49%		

6.2.2 Business and non-residential services

A summary of our current and proposed billing practices for non-residential customers in the central and western areas from 1 July 2024 can be found in the summary billing practice supporting document. We propose no change to our core non-residential services tariff structures across our service region.

Business (non-residential) tariffs

Table 36 and **Table 37** show our proposed business (non-residential) water and sewerage tariffs and prices for the next regulatory period.

 Table 36 Proposed business (non-residential) water and sewerage tariffs and prices – central (\$, 2023-24)

Central region	Proposed price movement								
	Unit	2023- 24	2024- 25	2025- 26	2026- 27	2027- 28			
Non-residential water tariff									

Central region		Proposed price movement							
Fixed potable water prices									
Water network fee	Per annum	\$299.20	\$307.35	0.00%	0.00%	0.00%			
Volumetric potable wat	er prices								
Water usage fee	Per kL	\$3.0762	\$3.0830	0.00%	0.00%	0.00%			
Non-residential sewera	ge tariff								
Fixed sewerage prices									
Sewerage network fee	Per annum	\$509.40	\$506.55	-0.56%	-0.57%	-0.57%			
Volumetric sewerage p	rices								
Sewerage disposal fee	Per kL	\$2.0097	\$2.0279	0.00%	0.00%	0.00%			
Non-residential recycle	d water (Class A)	tariff							
Volumetric recycled wa	ter prices								
Recycled water usage fee	Per kL	\$2.6148	\$2.6083	-0.25%	-0.25%	-0.25%			
Other tariffs									
Private fire service con	nections								
Private fire service connections	Per connection	\$119.96	\$123.56	0.00%	0.00%	0.00%			

Table 37 Proposed non-residential (business) water and sewerage tariffs and prices – western (\$, 2023-24)

Western region		Proposed price movement							
	Unit	2023-24	2024-25	2025- 26	2026- 27	2027- 28			

Western region	Western region Proposed price movement							
Non-residential water tariff								
Fixed potable water prices								
Water network fee – 20 mm	Per annum	\$206.37	\$212.56	0.00%	0.00%	0.00%		
Water network fee – 25 mm	Per annum	\$340.18	\$332.13	0.00%	0.00%	0.00%		
Water network fee – 32 mm	Per annum	\$577.47	\$544.16	0.00%	0.00%	0.00%		
Water network fee – 40 mm	Per annum	\$920.06	\$850.25	0.00%	0.00%	0.00%		
Water network fee – 50 mm	Per annum	\$1,455.33	\$1,328.51	0.00%	0.00%	0.00%		
Water network fee – 80 mm	Per annum	\$3,774.79	\$3,400.99	0.00%	0.00%	0.00%		
Water network fee – 100 mm	Per annum	\$5,915.81	\$5,314.05	0.00%	0.00%	0.00%		
Water network fee – 150 mm	Per annum	\$13,349.98	\$11,956.62	0.00%	0.00%	0.00%		
Volumetric potable water prices								
Water usage fee	Per kL	\$3.0611	\$3.0830	0.00%	0.00%	0.00%		
Non-residential sewerage tariff								
Fixed sewerage prices								
Sewerage network fee	Per annum	\$544.54	\$534.67	-1.85%	-1.88%	-1.92%		
Non-residential recycled water (C	lass A) ta	riff						
Fixed recycled water prices								

Western region			Proposed p	rice move	ment	
Recycled water network fee – 20 mm	Per annum	\$131.44	\$123.02	-6.84%	-7.34%	-7.92%
Recycled water network fee – 25 mm	Per annum	\$205.50	\$192.34	-6.84%	-7.34%	-7.93%
Recycled water network fee – 32 mm	Per annum	\$336.68	\$315.12	-6.84%	-7.34%	-7.93%
Recycled water network fee – 40 mm	Per annum	\$526.07	\$492.39	-6.84%	-7.34%	-7.93%
Recycled water network fee – 50 mm	Per annum	\$822.05	\$769.41	-6.84%	-7.34%	-7.93%
Recycled water network fee – 80 mm	Per annum	\$2,104.63	\$1,969.85	-6.84%	-7.34%	-7.93%
Recycled water network fee – 100 mm	Per annum	\$3,288.54	\$3,077.94	-6.84%	-7.34%	-7.93%
Recycled water network fee – 150 mm	Per annum	\$7,399.32	\$6,925.45	-6.84%	-7.34%	-7.93%

6.2.3 Trade waste services

We propose no change to our trade waste tariff structures across our service region.

Customers in the central region are charged a once-off application fee, followed by an agreement fee depending on the business's risk to our sewerage network. We also levy a fee on the number of beds served by a macerator disposal unit (often in hospitals and aged care facilities).

Customers in the western region are similarly charged a once-off application fee, followed by a management fee depending on the business's risk to our sewerage network.

We propose to rename the management fee to an agreement fee in the western region.

Revised naming of risk ranks to align over service region

We propose to inverse the labelling of our risk ranks in the western service region to align the risk rank ordering between our service regions – with risk rank 1 as the highest risk to our network and risk rank 4 or 5 as the lowest risk to our network.

We plan to review our trade waste tariffs over the upcoming regulatory period and engage with our customers for the following price submission.

Trade waste tariffs

Table 38 and **Table 39** show our proposed business (non-residential) trade waste tariffs and prices for the next regulatory period.

 Table 38 Proposed non-residential (business) water and sewerage tariffs and prices – central (\$, 2023-24)

ntral region	Proposed price movement							
	Unit	2023-24	2024-25	2025- 26	2026- 27	2027 2		
n-residential trade waste	tariffs							
de waste application price	es							
Risk Rank 1	Per application	\$2,543.88	\$2,543.88	0.00%	0.00%	0.00		
Risk Rank 2	Per application	\$2,543.88	\$2,543.88	0.00%	0.00%	0.00		
Risk Rank 3	Per application	\$2,543.88	\$2,543.88	0.00%	0.00%	0.00		
Risk Rank 4	Per application	\$700.04	\$700.04	0.00%	0.00%	0.00		
Risk Rank 5 (General)	Per application	\$364.55	\$364.55	0.00%	0.00%	0.00		
Risk Rank 5 (Commercial food business)	Per application	\$92.01	\$92.01	0.00%	0.00%	0.00		
de waste agreement price	es							
Risk Rank 1	Per annum	\$22,134.73	\$22,134.73	0.00%	0.00%	0.00		
Risk Rank 2	Per annum	\$18,360.05	\$18,360.05	0.00%	0.00%	0.00		
Risk Rank 3	Per annum	\$9,217.60	\$9,217.60	0.00%	0.00%	0.00		
Risk Rank 4	Per annum	\$2,013.12	\$2,013.12	0.00%	0.00%	0.00		
Risk Rank 5 (General including commercial food businesses)	Per annum	\$382.19	\$382.19	0.00%	0.00%	0.00		

Central region			Proposed pr	ice move	ment	
Food waste services fee	Per registered bed per annum	\$61.83	\$61.83	0.00%	0.00%	0.00%

Trade waste volumetric prices Volume Per kL \$0.9597 \$0.9597 0.00% 0.00% Trade waste quality prices **Biochemical Oxygen** Per kg \$1.1717 \$1.1717 0.00% 0.00% Demand Suspended Solids Per annum \$0.6347 \$0.6347 0.00% 0.00% Total Kjeldahl Nitrogen Per annum \$2.2554 \$2.2554 0.00% 0.00% Inorganic Total Per annum \$0.0226 \$0.0226 0.00% 0.00% **Dissolved Solids**

Table 39 Proposed non-residential (business) water and sewerage tariffs and prices – western (\$, 2023-24)

Western region	Proposed price movement							
	Unit	2023-24	2024-25	2025-26	2026-27	2027-28		
Non-residential trade was	ste tariffs				İ			
Trade waste application prices*								
Risk Rank 1	Per application	\$1,128.09	\$1,128.09	0.00%	0.00%	0.00%		
Risk Rank 2	Per application	\$475.66	\$475.66	0.00%	0.00%	0.00%		
Risk Rank 3	Per application	\$256.21	\$256.21	0.00%	0.00%	0.00%		
Risk Rank 4	Per application	\$162.98	\$162.98	0.00%	0.00%	0.00%		

0.00%

0.00%

0.00%

0.00%

0.00%

Western region	ce movemer	nt						
Trade waste agreement	prices*							
Risk Rank 1	Per annum	\$3,022.22	\$3,022.22	0.00%	0.00%	0.00%		
Risk Rank 2	Per annum	\$1,485.48	\$1,485.48	0.00%	0.00%	0.00%		
Risk Rank 3	Per annum	\$664.42	\$664.42	0.00%	0.00%	0.00%		
Risk Rank 4	Per annum	\$316.73	\$316.73	0.00%	0.00%	0.00%		
Non-residential trade waste volumetric and quality tariffs								
Trade waste volumetric	prices							
Volume (Category B)	Per kL	\$1.9766	\$1.9766	0.00%	0.00%	0.00%		
Volume (Category C)	Per kL	\$1.3837	\$1.3837	0.00%	0.00%	0.00%		
Trade waste quality price	25							
Biochemical Oxygen Demand (>400mg/L)	Per kg	\$0.3995	\$0.3995	0.00%	0.00%	0.00%		
Suspended Solids (>400mg/L)	Per kg	\$0.2544	\$0.2544	0.00%	0.00%	0.00%		
Total Phosphorus (>30mg/L)	Per kg	\$0.5949	\$0.5949	0.00%	0.00%	0.00%		
Total Combined Nitrogen (>60mg/L)	Per kg	\$0.7652	\$0.7652	0.00%	0.00%	0.00%		
Total Oxidisable Sulphur (>100mg/L)	Per kg	\$1.1056	\$1.1056	0.00%	0.00%	0.00%		
Sodium (>250mg/L)	Per kg	\$0.1690	\$0.1690	0.00%	0.00%	0.00%		
Arsenic (>0.2g/day)	Per kg	\$0.2543	\$0.2543	0.00%	0.00%	0.00%		
Trade waste quality price	es – heavy me	etals						
Cadmium (0.4g/day)	Per kg	\$0.2543	\$0.2543	0.00%	0.00%	0.00%		
Chromium III & IV (>100g/day)	Per kg	\$0.2543	\$0.2543	0.00%	0.00%	0.00%		

Western region	on Proposed price movement								
Copper (>100g/day)	Per kg	\$0.2543	\$0.2543	0.00%	0.00%	0.00%			
Lead (>100g/day)	Per kg	\$0.2543	\$0.2543	0.00%	0.00%	0.00%			
Mercury (>0.2g/day)	Per kg	\$0.2543	\$0.2543	0.00%	0.00%	0.00%			
Nickel (>10g/day)	Per kg	\$0.2543	\$0.2543	0.00%	0.00%	0.00%			
Selenium (>10g/day)	Per kg	\$0.2543	\$0.2543	0.00%	0.00%	0.00%			
Zinc (>100g/day)	Per kg	\$0.2543	\$0.2543	0.00%	0.00%	0.00%			
Non-residential trade was	ste penalty u	nits							
1st major breach	Per event	\$204.68	\$204.68	0.00%	0.00%	0.00%			
2nd major breach	Per event	\$432.13	\$432.13	0.00%	0.00%	0.00%			
3rd major breach	Per event	\$966.62	\$966.62	0.00%	0.00%	0.00%			
4th major breach	Per event	\$1,967.38	\$1,967.38	0.00%	0.00%	0.00%			

*Trade waste risk ranks have been inversed for the western region.

6.3 New customer contributions

GWW is investing in the delivery of assets to meet the significant growth occurring across our service area. We charge new customer contributions (NCC) for new lot connections to recover a contribution to the infrastructure costs to service new customers through the augmentation and expansion of networks and treatment plants. Our proposed NCC charges have been informed by the feedback received through three dedicated engagement forums with representatives from the property development industry, outlined in Section 2.4.3.

6.3.1 Existing New Customer Contribution structure

The existing NCC charging approaches differ in the legacy service areas. The entire central region is covered by a standard water charge and standard sewer charge with a dedicated recycled water NCC charge applying in the Greek Hill and West Werribee recycled water zones. All NCC charges in the central region have remained flat in real terms since 2018.

In the western region, charges are split by Infill and Greenfield NCCs. Under the ESC's 2020 determination, the Greenfield charge has been increasing by 5% in real terms each year as a transitional approach to more cost-reflective levels. Both the Greenfield and Infill charges are reflected in the existing determination as a per lot connection charge that's fully inclusive of water, recycled water (if applicable) and sewer connections. In practice, some new connections in the western region do not receive a sewer connection and the charges are therefore applied as a 50/50 split with water (including any applicable recycled water) and sewer connections each charged at 50% of the per lot rate.

6.3.20ur proposed New Customer Contribution structure

GWW has used the ESC's net incremental cost approach and the ESC's NCC pricing principles to undertake an assessment of the costs to service new connections across our service area.

We developed a new GWW net incremental cost model to investigate the costs per connection across the key growth area covered by the western Greenfield charge and the costs per connection across the central region and infill connections in the western region and recycled water costs in the Greek Hill and West Werribee zones. **Table 40** shows the modelled costs per connection as well as our proposed transition paths over the regulatory period.

Current structure	New Structure	Service connection	2023- 24	2024- 25	2025- 26	2026- 27	2027- 28	Modelled cost per connection
CWW	GWW	Water	\$827	\$915	\$960	\$1,008	\$1,059	
Standard Standard	Sewer	\$827	\$915	\$960	\$1,008	\$1,059	\$3,776	
WW infill	GWW	Water	\$1,566	\$915	\$960	\$1,008	\$1,059	combined
	Standard	Sewer	\$1,566	\$915	\$960	\$1,008	\$1,059	
WW	Western	Water	\$3,627	\$3,808	\$3,999	\$4,199	\$4,409	\$14,831
Greenfield	Greenfield	Sewer	\$3,627	\$3,808	\$3,999	\$4,199	\$4,409	combined
West Werribee and Greek Hill	West Werribee and Greek Hill	Recycled water	\$2,999	\$3,149	\$3,306	\$3,472	\$3,645	\$12,390

Table 40 Proposed new customer connection charges (\$, 2023-24)

We propose to maintain Western Greenfield water and sewer charge structure to reflect the higher costs per connection of greenfield development in the western region (\$14,831) relative to the average connection costs across the GWW service area. This charge will increase at 5% per annum in real terms throughout the regulatory period to transition to the modelled cost.

A standard NCC charge will be used for water and sewer connections in all areas not subject to the Western Greenfield charge to reflect the modelled lower cost to serve (\$3,776). This encompasses the former CWW standard charges and WW infill charges to form a consistent GWW standard charge. This standard charge will be brought back into alignment with the Yarra Valley Water (YVW) and South East Water (SEW) standard charge rate in 2024-25 and increased by 5% per annum in real terms for the remainder of the period to transition towards the modelled cost.

The alignment of the existing CWW standard charge and WW infill simplifies our structure for connections outside of Western Greenfield development and delivers consistency across Melbourne for standard NCC charges outside of growth areas. The reduction of the existing WW infill charge to a GWW standard NCC charge has limited impact on the revenue recovered from infill development due to the limited number of new infill connections in the western region.

The existing recycled water charge for the Wester Werribee and Greek Hill areas is also proposed to increase by 5% per annum in real terms to transition towards the modelled cost to serve.

The transition paths for our proposed NCC charges have been developed to make a reasonable transition towards the modelled costs per connection during the regulatory period. These transition pathways have been tested with the development industry through our dedicated forum (outlined in Section 2.4.3) and take into consideration:

- the annual impact of charge increases on the development industry (price shocks) and the costs for new homes
- the current low rate of return environment for our assets with long asset life and the impact on the building block revenue requirement and tax allowance of raising developer charges further
- the broader benefit provided to GWW customers through recycled water connections reducing the demand placed on potable water
- the ESC's intention to review the existing NCC regulatory framework commencing in 2023-24 and the potential changes this review may bring to the development of NCC charges for the 2028 price submission.

We will continue to use our negotiation framework for instances where our scheduled NCC charges may not be appropriate.

6.4 Our miscellaneous products and services

We provide a range of additional products and services to our customers beyond our core services such as:

- hydrant, standpipe access and water carter services
- land and property development services
- building alteration, new connection and metering services
- information and administration services.

All of our scheduled and non-scheduled miscellaneous charges are developed in accordance with the ESC's pricing principles for miscellaneous services. Through integration, we have aligned several non-scheduled miscellaneous charges across the GWW service area whenever the underlying services, processes and costs were the same across the central and western areas. Many of our non-scheduled miscellaneous fees continue to include fixed costs related to existing and ongoing contracts. As these contracts expire, we will continue to update and make alignments to our non-scheduled miscellaneous charges across our entire service region between in line with the pricing principles.

We have reviewed the prices of our top miscellaneous products and services to ensure we continue to recover the costs associated with their provision – in line with the ESC pricing principles for miscellaneous fees. Our core scheduled miscellaneous charges are captured in **Table 41**. If the cost of providing any of our top-scheduled products and services increases between 2024-25 to 2027-28, the associated shortfall in revenue will be absorbed by GWW until the next price reset.

 Table 41 Proposed top miscellaneous charges (\$, 2023-24)

Charge categories	Proposed Price Movement					
	Unit	2023-24	2024-25	2025- 26	2026- 27	2027- 28
Core miscellaneous fees and charge	25					
GWW miscellaneous fees						
Information statement – standard	Per application	\$20.80	\$20.80	0.0%	0.0%	0.0%
Information statement – priority	Per application	\$60.40	\$60.40	0.0%	0.0%	0.0%
Land development administrative fee: 1-10 lots	Per application	N/A*	\$5,098.10	0.0%	0.0%	0.0%
Land development administrative fee: More than 10 lots	Per application	N/A*	\$8,415.60	0.0%	0.0%	0.0%
Recycled water connection inspection – residential	Per application	N/A*	\$278.20	0.0%	0.0%	0.0%
Simple plumbing application – residential	Per application	N/A*	\$139.41	0.0%	0.0%	0.0%
Central region miscellaneous fees						
Potable water meter assembly & installation (20mm) – new connection	Per application	\$321.60	\$319.75	0.0%	0.0%	0.0%
Recycled water meter assembly & installation (20mm) – new connection	Per application	\$345.70	\$335.04	0.0%	0.0%	0.0%
Potable water meter installation (20mm) – new connection	Per application	\$89.00	\$123.75	0.0%	0.0%	0.0%
Meter with remote device and installation (20mm)	Per application	\$251.70	\$277.70	0.0%	0.0%	0.0%

Charge categories	Proposed Price Movement					
Property service short side installations (20mm)	Per application	\$2,073.90	\$1,917.14	0.0%	0.0%	0.0%
Western region miscellaneous fees						
Water tapping fees – drinking water (20mm installation)	Per application	\$505.87	\$505.87	0.0%	0.0%	0.0%
Non-core miscellaneous fees and charges At					At cost	

* This fee simplifies and combines the previous central region application, acceptance and water connection deposit fees that were listed separately but charged together. Going forward, thse fee will apply to the whole GWW service area.

6.5 Price control

Summary

- We propose to maintain our existing tariff basket form of price control.
- We propose to maintain existing annual adjustment mechanisms with amendments to Schedule 5A (selection of tariffs to be adjusted).

6.5.1 Form of price control

We propose to maintain our current tariff basket form of price control for all charges (including trade waste, new customer contributions and miscellaneous charges) under the determination for the regulatory period.

This form of price control was approved by the ESC in our application, under clause 3 of our respective determinations, in the lead-up to our integration to form GWW to allow us to:

- respond to the challenges of two different tariff structures with deviating tariffs
- respond to significant changes in bulk variable changes proposed in Melbourne Water's 2021 price review in lieu of an omitted clause in CWW's 2018 price submission
- deliver on expectations set by the Minister to smooth bill movements over the remainder of the period.

This mechanism adopted under clause 3 of CWW and WW's determinations included a constraint to limit price increases for individual tariffs to 10% per annum in real terms. The constraint will continue to allow GWW to manage customer bill paths and relative relationships between customer types as we transition our tariffs over time.

We propose to maintain this constraint to 10% per annum in real terms. We do not expect to use the adjustment in the tariff basket in next period to the same extent as over the past three years as the adjustments were used for our unique circumstances noted above.

The tariff basket approach allows the flexibility to rebalance our prices without overcollecting revenue as we continue to align our tariff structures and tariffs over the upcoming regulatory periods. It also allows us to respond to short-term fluctuations in our non-controllable costs that are passed through to customers to smooth bill impacts between customer segments.

The tariff combined with our demand forecasts balances demand and revenue risk more to us than our customers and provides greater price stability to customers.

Equation 1 Proposed tariff basket form of price control

$$\frac{\sum_{i=1}^{n} \sum_{j=1}^{m} p_{t,ij} \times q_{t-2,ij}}{\sum_{i=1}^{n} \sum_{j=1}^{m} p_{t-1,ij} \times q_{t-2,ij}} \ge \frac{\sum_{i=1}^{n} \sum_{j=1}^{m} \hat{p}_{t,ij} \times q_{t-2,ij}}{\sum_{i=1}^{n} \sum_{j=1}^{m} p_{t-1,ij} \times q_{t-2,ij}}$$

For i = 1, 2, ..., n and j = 1, 2, ..., m

Where:	
$p_{t-1,ij}$	is the tariff charged in regulatory year $t - 1$ for component j of tariff i
p _{t,ij}	is the tariff charged in regulatory year t , for component j of tariff i where the revised tariff schedule is not applied and excludes commission approved pass-throughs
$\widehat{p}_{t,ij}$	is the tariff charged in regulatory year t, for component j of tariff i where the revised tariff schedule is applied and excludes commission approved pass-throughs
q _{t-2,ij}	is the quantity of component j of tariff i that was sold in regulatory year $t - 2$, or, if an actual quantity is not available, either an estimate of the quantity of component j of tariff i that would have been sold in regulatory year $t - 2$ or a forecast of the quantity of component j of tariff i that is expected to be sold in regulatory year $t - 2$

6.5.2 Adjustment to prices

We propose to maintain our existing annual price adjustments contained in CWW's 2018 price determination and WW's 2020 price determination, with amendments to which tariffs would be included in the adjustment. This is presented in **Table 42**.

These mechanisms allow us to adjust for:

- our rolling 10-year average cost of debt
- pass-through of other annual changes to Melbourne Water bulk water and sewerage prices including cost of debt adjustments where applicable
- annual desalination water order and any other changes to related management or security charge costs.

 Table 42 Proposed annual adjustments to tariffs

Tariffs	Cost of debt annual adjustment	Melbourne Water bulk water fixed annual adjustments	Melbourne Water bulk sewerage fixed annual adjustments	Desalination water order and associated costs annual adjustments
Residential and non- residential fixed water tariffs	Х	Х		
Residential and non- residential variable water tariffs	Х			Х
Residential and non- residential fixed sewerage tariffs	х		Х	
Non-residential variable sewerage tariffs	х			
Residential and non- residential fixed recycled water tariffs	х			
Residential and non- residential variable recycled water tariffs	Х			

In addition to these annual price adjustment mechanisms, we propose that Section 4 of either CWW's 2018 price determination or WW's 2018 price determination in response to events that are uncertain or unforeseen applies for the regulatory period.

Supporting documents for tariff structure and fees:

- PS24 tariff strategy
- Summary of billing practices
- PS24 annual adjustments summary
- Melbourne Metropolitan Water Tariff Review Focus Group Report
- PS24 NCC Model
- PS24 NCC supporting document
- NCC negotiating framework

7. Setting our prices

7.1 Revenue requirement

Our revenue requirement reflects the costs we need to recover to deliver reliable, safe and affordable water services to our customers and provide a return to our shareholder, while ensuring long-term financial sustainability. We calculated our revenue requirement using the ESC 'building block' methodology.

GWW's revenue requirement is made up of:

- operating expenditure controllable and non-controllable expenditure (such as water and sewage bulk charges from Melbourne Water, environmental contribution and other licence fees)
- return on capital the closing value of our regulated asset base (RAB) for each year of the regulatory period, multiplied by the regulatory rate of return (RRR)
- return of capital (regulatory depreciation) on existing and new assets
- tax allowance based on a 30% rate as per the ESC's guidance paper and template.

To deliver the outcomes proposed in this price submission, the forecast revenue requirement for the next regulatory period is \$3,483.0 million.

	2024-25	2025-26	2026-27	2027-28	Total
Operating expenditure - controllable	218.18	218.52	219.00	220.42	876.12
Operating expenditure - non-controllable	410.17	411.65	411.16	411.80	1,644.78
Return on assets	84.08	90.96	98.40	106.28	379.73
Regulatory depreciation	102.15	108.07	114.04	119.49	443.74
Tax liability	32.17	34.85	34.94	36.70	138.66
Total revenue requirement	846.75	864.05	877.54	894.69	3,483.03

Table 43 Revenue requirement 2024-25 to 2027-28 (\$million, 2023-24)

Setting our prices

Table 44 Revenue requirement 2028-29 to 2032-33 (\$million, 2023-24)

	2028-29	2029-30	2030-31	2031-32	2032-33
Operating expenditure - controllable	222.72	224.93	226.97	229.10	231.20
Operating expenditure - non- controllable	412.37	412.31	412.46	412.95	412.56
Return on assets	114.85	124.36	138.28	153.54	166.12
Regulatory depreciation	121.22	123.72	128.05	133.07	138.24
Tax liability	35.41	36.74	36.28	38.17	38.87
Total revenue requirement	906.57	922.06	942.02	966.83	986.99



Figure 10 Revenue requirement 2024-25 to 2032-33 (\$million, 2023-24)

The following sections outline each of the components of the total revenue requirement for the next regulatory period.

7.2 Regulatory asset base

With the integration of CWW and WW to form GWW, the opening RAB for GWW as of 1 July 2021 was calculated in line with the ESC's guidance paper and was \$3,021.1 million, as set out in **Table 45**.

 Table 45
 Establishing GWW's regulatory asset base, 2017-18 to 2020-21 (\$million, 2023-24)

	2017-18	2018-19	2019-20	2020-21
City West Water				
Opening RAB	2,215.36	2,234.14	2,243.79	2,286.85
Plus gross capital expenditure	131.73	147.63	178.00	176.61
Less government contributions	0.00	0.00	0.00	0.00
Less customer contributions	-40.95	-45.10	-43.72	-33.27
Less proceeds from disposals	-0.48	-0.71	-0.45	-0.48
Less regulatory depreciation	-71.52	-92.18	-90.78	-91.46
Closing asset base	2,234.14	2,243.79	2,286.85	2,338.25
Western Water				
Opening RAB	484.38	532.72	583.03	627.96
Plus gross capital expenditure	75.28	82.47	96.46	110.18
Less government contributions	0.00	0.00	0.00	0.00
Less customer contributions	-17.72	-23.69	-41.57	-39.68
Less proceeds from disposals	-0.56	-0.63	-0.36	-0.49
Less regulatory depreciation	-8.66	-7.83	-9.60	-15.10
Closing asset base	532.72	583.03	627.96	682.86
Greater Western Water				

	2017-18	2018-19	2019-20	2020-21
Opening RAB				2,914.80
Plus gross capital expenditure				286.79
Less government contributions				0.00
Less customer contributions				-72.95
Less proceeds from disposals				-0.97
Less regulatory depreciation				-106.57
Closing asset base				3,021.11

7.2.1 Closing regulatory asset base as of 30 June 2023

GWW's closing RAB as of 30 June 2023 was \$3,255.5 million, as set out in **Table 46**. The values for inputs used to calculate the closing RAB – such as gross capital expenditure, government and customer contribution, and proceeds from disposals – are actual values for the period 2020-21 to 2022-23. The regulatory depreciation used was the sum of forecast values of CWW and WW according to their respective determinations in 2018 and 2020, over the same period.

Table 46 Closing regulatory asset base, 2020-21 to 2022-23 (\$million, 2023-24)

	2020-21	2021-22	2022-23
Opening RAB	2,914.81	3,021.11	3,109.62
Plus gross capital expenditure	286.79	281.36	336.42
Less government contributions	0.00	-12.11	-5.67
Less customer contributions	-72.95	-67.73	-88.05
Less proceeds from disposals	-0.97	-3.04	-1.02
Less regulatory depreciation	-106.57	-109.98	-95.81
Closing asset base	3,021.11	3,109.62	3,255.48
7.2.2 Opening regulatory asset base as of 1 July 2024

We estimate GWW's opening RAB as of 1 July 2024 at \$3,402.1 million, as set out in **Table 47**.

To calculate the closing RAB for each year of the next regulatory period, we added forecast capital expenditure to the opening RAB and subtracted customer contributions, government contributions, regulatory depreciation and proceeds from disposals. We used the latest forecast capital expenditure for 2023–24 to determine the 2024–25 opening RAB.

2026-27 2027-28 2023-24 2024-25 2025-26 3,897.09 **Opening RAB** 3,255.48 3,402.11 3,575.73 3,730.56 Plus gross capital 334.35 370.86 348.77 357.92 309.52 expenditure Less government -15.60 -18.16-0.16 0.00 0.00 contributions Less customer -75.53 -76.11 -84.89 -76.56 -81.41 contributions Less proceeds from -0.82 -0.80 -0.79 -0.81 -0.81 disposals Less regulatory -95.79 -102.15-108.07 -114.04 -119.49 depreciation **Closing asset base** 3,402.11 3,575.73 3,730.56 3,897.09 4,004.92

Table 47 Forecast regulatory asset base, 2023-24 to 2027-28 (\$million, 2023-24)

Table 48 outlines our proposed opening and closing RAB forecast over the period2028-29 to 2032-33.

Table 48 Forecast regulatory asset base, 2028-29 to 2032-33 (\$million, 2023-24)

	2028-29	2029-30	2030-31	2031-32	2032-33
Opening RAB	4,004.92	4,140.37	4,319.82	4,487.63	4,651.54
Plus gross capital expenditure	340.10	389.16	380.80	385.79	337.06

	2028-29	2029-30	2030-31	2031-32	2032-33
Less government contributions	0.00	0.00	0.00	0.00	0.00
Less customer contributions	-82.66	-85.22	-84.19	-88.05	-89.50
Less proceeds from disposals	-0.78	-0.77	-0.76	-0.75	-0.74
Less regulatory depreciation	-121.22	-123.72	-128.05	-133.07	-138.24
Closing asset base	4,140.37	4,319.82	4,487.63	4,651.54	4,760.11

- **Gross capital expenditure** we forecast expenditure on capital works of \$1.7 billion over the period 2023-24 to 2027-28 and a further \$1.8 billion over the period 2028-29 to 2032-33. This increases the value of the RAB by the end of 2032-33. Our approach to forecasting gross capital expenditure is outlined in Section 4.14.1.3.
- Government contribution this mainly includes the Western Irrigation Network (WIN), which is a \$116 million project jointly funded by the Australian Government, GWW and the private agribusinesses that will become the network's foundation customers. WIN will connect dryland farmers in the Parwan-Balliang area, near Bacchus Marsh, with a guaranteed supply of Class C recycled water suitable for irrigation farming from 2023.

GWW received a \$2 million grant for the Werribee Open Range Zoo (WORZ) Recycled Water Pipeline project. This grant has been fully paid by DEECA and is sitting on GWW's balance sheet until the project is completed in January 2024.

- Customer contribution forecasts for new customer contributions are based on growth in customer numbers and the prices proposed in this submission outlined in Section 76.3.
- **Proceeds from disposals** forecast estimates for proceeds from disposals have been derived from the acquisition and disposal activities associated with managing the corporate motor vehicle, heavy vehicle, plant and equipment fleet over the regulatory period.
- Regulatory depreciation GWW continues to calculate regulatory depreciation as per the approach (straight-line) used in the current regulatory period, which is in line with the ESC's guidance paper. Existing assets are depreciated on the basis of an average asset life and new assets are depreciated using a straight-line approach, based on the estimated asset lives and asset utilisation for the individual asset types.

Our existing RAB has an opening value in 2023-24 of \$3,255.5 million with an average remaining asset life (book-value weighted) of 54.3 years. **Table 49** shows the

breakdown of the average asset lives by asset class. The rate of depreciation for new assets is consistent with rates in our financial accounts and the useful life of the assets. The gross capex weighted average useful lives of new assets is 74.1 years over the period 2023-24 to 2027-28.

Table 49 Regulatory average asset lives by asset class

Asset class	Average asset life (A)	% of asset base (B)
Water	64.36	35.19%
Sewerage	59.69	43.77%
Recycled water	43.64	7.70%
Other	16.28	13.35%
Total (sum product of A x B)	54.30	

The regulatory depreciation for 2023-24 is calculated as the sum of:

- regulatory depreciation based on existing assets of \$92.3 million (as shown in the ESC's pricing model, RollForward_FO tab)
- regulatory depreciation based on new assets of \$3.5 million (as shown in the ESC's pricing model, Capex_FO input tab)

Table 50 and **Table 51** outline the regulatory depreciation on new and existing assets (a component of the revenue requirement) with the average depreciation rate across the period.

Table 50 Regulatory depreciation, 2024-25 to 2027-28 (\$million, 2023-24)

	2024-25	2025-26	2026-27	2027-28	Total
Depreciation of existing assets	91.47	90.80	90.80	90.39	363.46
Depreciation of new assets	10.68	17.27	23.24	29.10	80.28
Total depreciation	102.15	108.07	114.04	119.49	443.74
Depreciation as a % of average RAB	2.93%	2.96%	2.99%	3.02%	2.98%

Table 51 Regulatory depreciation, 2028-29 to 2032-33 (\$million, 2023-24)

	2028-29	2029-30	2030-31	2031-32	2032-33
Depreciation of existing assets	86.69	83.81	82.14	81.11	80.86
Depreciation of new assets	34.53	39.90	45.91	51.96	57.38
Total depreciation	121.22	123.72	128.05	133.07	138.24
Depreciation as a % of average RAB	2.98%	2.92%	2.91%	2.91%	2.94%

7.3 Return on the regulatory asset base

The return on assets is a function of the RAB and the regulatory rate of return (RRR). GWW's return on assets is calculated by applying a RRR to the RAB. The RRR comprises two components: cost of debt and return on equity (based on PREMO rating).

7.3.1 Cost of debt

The 10-year trailing average approach provided by the ESC was used to estimate the benchmark cost of debt in the pricing model. This is calculated as the simple average of 10 years of cost of debt that reflects the yields of the Reserve Bank of Australia 10-year BBB-rated corporate bond.

7.3.2 Return on equity and PREMO rating

We have applied a return on equity (real) of 4.1%, which reflects our self-assessed PREMO rating of 'Standard'. As outlined in **Table 52** this results in a RRR of 2.41% to 2.69% over the regulatory period 2024-25 to 2027-28. To calculate the RRR, in line with the ESC's guidance paper and advice, we have applied a benchmark gearing ratio of 60% and forecast inflation of 3.5% over the same period.

2024-25 2025-26 2026-27 2027-28 Cost of debt - nominal 6.76% 6.76% 6.76% 6.76% Cost of debt - 10-year trailing average 4.83% 4.97% 5.12% 5.31% Forecast inflation 3.50% 3.50% 3.50% 3.50% Cost of debt (real) 1.29% 1.42% 1.56% 1.74% Return on equity (real) 4.10% 4.10% 4.10% 4.10% 60.0% 60.0% 60.0% 60.0% Gearing Regulatory rate of return (real) 2.41% 2.49% 2.58% 2.69%

 Table 52 Regulatory rate of return, 2024-25 to 2027-28

An outline of the value of the return on assets (a component of the revenue requirement) for each year from 2024-25 to 2032-33 is provided in **Table 53** and **Table 54**.

Table 53 Return on assets, 2024-25 to 2027-28 (\$million, 2023-24)

	2024-25	2025-26	2026-27	2027-28	Total
Return on existing assets	75.10	75.31	75.66	76.43	302.50

	2024-25	2025-26	2026-27	2027-28	Total
Return on new assets	8.98	15.66	22.73	29.85	77.22
Total return on assets	84.08	90.96	98.40	106.28	379.73

Table 54 Return on assets, 2028-29 to 2032-33 (\$million, 2023-24)

	2028-29	2029-30	2030-31	2031-32	2032-33
Return on existing assets	77.61	78.38	81.08	84.00	85.36
Return on new assets	37.24	45.98	57.19	69.54	80.76
Total return on assets	114.85	124.36	138.28	153.54	166.12

7.4 Tax allowance

The regulated return on assets is expressed in post-tax terms rather than a tax adjustment being included in the specification. Therefore, it is necessary to include an estimate of tax liabilities in the revenue requirement.

The tax liability has been calculated in accordance with the ESC's guidance paper. **Table 43** shows our proposed tax allowance for the next regulatory period is \$138.7 million. This is the estimate determined in the ESC's financial model and assumes the corporate tax rate remains at 30% for the duration of the next regulatory period.

Based on the precedent, ^{xv} it is possible that an application to the Australian Taxation Office (ATO) to exclude gifted assets from taxable revenue would be supported. If supported, future taxable revenue would exclude gifted assets from taxable revenue, subsequently reducing taxable profit and delaying the payment of tax.

If, during the course of the regulatory period, there are changes associated with taxation status of either new customer contributions or developer gifted assets, we will assess the impact and in the case of there being a benefit, will consider passing that benefit to customers through lower prices.

7.5 Financial position

Our financial model provides outcomes for the four key financial indicators, and these are summarised in **Table 55**. Except for the interest cover ratio, the remaining three financial indicators breach the ESC's benchmark requirements for all years of the regulatory period 2024-25 to 2027-28.

Table 55 Financial indicators, 2024-25 to 2027-28

	Benchmark	2024-25	2025-26	2026-27	2027-28
Interest cover (times)	>1.50x	1.87x	1.87x	1.75x	1.71x
Net debt / RAV (gearing) %	<70%	75.61%	78.38%	80.37%	82.91%
Funds from operation / net debt (%)	>10%	4.11%	4.22%	3.75%	3.62%
Internal financing ratio (%)	>35%	9.59%	14.68%	11.19%	12.51%

Interest cover is forecast to hover above ESC's benchmark, however we note that over the regulatory period it is trending downwards driven by higher interest payments outpacing the growth in earnings.

The gearing ratio is forecast to increase from 75.6% to 82.91% over 2024-25 to 2027-28. This is forecast to remain above the ESC's benchmark 70% figure. As noted throughout the submission, the main driver of GWW's financial position is the required increase in capital expenditure to fund the acceleration in population growth across our service region.

We believe our gearing ratio remains serviceable based on the strong forecast growth in our service region and the proposed stable real price path. Based on our extensive customer engagement, we feel this best meets the views of our customers and ensures smooth price movements into the future.

7.6 Growth forecasts

Demand forecasting is a key input to our price submission, driving our forecast costs and prices.

Demand forecasting considers several forecasts but begins with growth forecasting. Growth forecasting relates to population growth and the subsequent growth in lots and serviced dwellings in our service area. These forecasts influence:

- how we plan our growth assets (location, timing and size)
- the number of new connections and meters.

We use these growth forecasts to forecast:

- demand for water and sewer usage
- the volume of water we need to order or source locally
- how much sewage will need to be treated from our bulk suppliers or locally.



Figure 11 How demand and growth influence our price submission

7.6.1 Residential growth forecast

Our service region has grown considerably over the past decade with growth per annum peaking at almost 3.9% in 2020-21. The number of residential and non-residential water customers increased from 524,035 in 2017-18 to 615,619 in 2022-23, an increase of 17.5% or 3.5% per annum.



Figure 12 Historical ESC water customer growth

This growth was primarily in the outer regions, our high growth areas. Growth in the previous WW region peaked at over 7% in 2021-22 and growth in the previous CWW region peaked at just below 4% in 2020-21.



Figure 13 Historical ESC customer growth by region

The COVID-19 pandemic and the Federal and State government responses, such as closure of international borders, increased interstate migration and restrictions to business trading and movement, have significantly reduced growth since 2020-21. This slowdown was exacerbated by the impacts of material supply and labour constraints in the construction and land development industry and the public failure of several home builders.

Growth across the service region dropped to a low of 2.5% in 2021-22, with the decline primarily driven by inner-city regions. Growth in our western region continued to climb even through the pandemic.

In 2022-23, overall growth in residential and non-residential customers has indicated a small rebound towards pre-pandemic levels. However, water and sewerage volumes remain lower than historic volumes.

While migration has recommenced and is expected to add to demand over time, the rate of rebound towards pre-pandemic levels remains uncertain over the forecast period. Although we continue to experience high growth, we anticipate that the rapid increase in interest rates since late 2022, high inflation and low wage growth will place significant downward pressure on growth in the near future. We are seeing a decline in developer work applications compared to the previous financial year.

We have primarily adopted the Department of Transport and Planning's unpublished Victorian Government Projections – Victoria in Future 2022 to forecast our residential serviced dwelling demands for the regulatory period. This forecast is residential in nature, is at a Statistical Area Level 2 (SA2) resolution and is the most up-to-date data available.

Ultimately our forecast is based on Victoria in Future population and households projection reports (VIF). However, the significant differences in capital costs in growth in infill and greenfield areas, particularly in those greenfield areas where GWW provides non-retail assets such as transfer and treatment facilities, requires a reliable and smaller resolution of the spatial distribution of the growth within our service area. This is complicated by the significant areas where some or all services are unlikely to be provided in the forecast period. To address this, we have:

- reviewed our own work applications (to develop lots into dwellings) to understand and distribute the growth in VIF at a Statistical Area Level 1 (SA1) resolution (this is a finer resolution than VIF) in the short term
- continued to engage growth forecasting experts iD and Research4 to provide independent forecasts for population and dwelling growth at the SA1 and even finer resolution. Finer resolution allows us to better refine the VIF forecast and its distribution of growth across our service region in the short to medium term forecast.

With these sources, we have developed growth forecasts for residential serviced dwellings using an amelioration process that synthetises the top-down (SA2) level data from VIF with our more granular level data (SA1). These forecasts have been rebased to our ESC reported water customer numbers as at 30 June 2023.^{xvi}

Figure 14 presents our final residential serviced dwellings forecast against:

- the upper bound of forecast residential serviced dwellings derived from VIF that includes all SA2 localities in GWW's service region, include SA2 localities that overlap with other authorities (Central Highlands Water).
- the lower bound of forecast residential serviced dwellings from VIF that only includes SA2 localities fully encompassed in GWW's service region (excludes SA2s that overlap our boundaries with others)
- forecast residential serviced dwellings constructed from internal land development data and external iD's RDL data and Research4 forecasts.

Overall, our final serviced dwelling forecast sits between the upper and lower bounds of the VIF 2022 forecasts.



Figure 14 Forecast serviced dwellings

This growth is not shared consistently across the service region, with most of the growth occurring in the CBD, and the west and outer west as shown in **Figure 15**.



Figure 15 Growth disruption across the GWW service region

7.6.2 Non-residential growth

The primary references for our growth forecast are residential in nature, primarily through ViF and other government planning documents (outlined in our lot forecast).

Non-residential growth forecasting has been challenging historically and continues to be challenging due to the COVID-19 pandemic changing our economic landscape.

We forecast non-residential growth by first determining the historical average ratio of non-residential serviced dwellings to residential serviced dwellings in each of the smallest geographical level of detail in our data (this is at the ABS's residential mesh block level).^{xvii}. Overall, this averages to about 1.7 non-residential serviced dwellings for every 100 residential serviced dwellings across GWW.

For each meshblock we assume the non-residential connections have the same growth rate as residential connections and apply that to the non-residential connections to forecast non-residential growth in that meshblock. This is then aggregated to provide to overall non-residential connection growth used in our price submission.

7.7 Bulk water demand forecasts

Bulk water demand forecasts are used to determine:

- our water sales forecast
- required supply volumes from different parts of our network
- forecast bulk water costs payable to Melbourne Water

• where we need new capital expenditure.

Our growth forecasts are an input into the bulk water demand forecast.

In 2022-23, GWW's residential customers account for 59% of total water demand and non-residential customers for 29% of total water demand. The remaining 12% is non-revenue water. Non-revenue water is not billed to customers or used internally by GWW and our processes. It is generally water that is lost through leaks or bursts, used for firefighting or stolen.

We source most of our water from Melbourne Water. Water from Southern Rural Water and potable water from our own local sources makes up the rest of our supply requirements.



Figure 16 Breakdown of GWW potable water demand and supply in 2022-23

As we currently have different tariffs for customers in central and western regions, we forecast our bulk water demands for central and western separately. However, we present our total bulk water supply costs as the cumulative cost for GWW.

7.7.1 Bulk water demand forecast

Underpinning our potable water demand forecasts is the Integrated Supply-Demand Planning (iSDP) model, developed by the Institute for Sustainable Futures at the University of Technology Sydney (UTS), Sydney Water and the CSIRO on behalf of Water Services Association of Australia (WSAA) and the National Water Commission.

CWW and WW used the iSDP model to forecast total potable water demand that underpins their end-use potable water forecasts for previous price submissions.^{xviii} The iSDP model is also used when supplying bulk potable water forecasts to Melbourne Water in the development of its price submission and to DEECA in its development of the *Greater Melbourne Urban Water and System Strategy* for the central region.

The extensive use and experience across CWW and WW and the ESC's general acceptance of the approach in previous price submissions, supported the decision to continue using the iSDP model to forecast potable water demands. However, we continue to maintain different iSDP models for the areas previously serviced by CWW and WW.

The iSDP model produces a forecast for bulk potable water demand per year by separately determining a residential and non-residential water demand forecast and adding a fixed percentage representing non-revenue water. The residential forecast generated represents the aggregated demand for each (water) use – showers, toilets, dishwashers, taps, clothes washers, coolers and others.

These models are calibrated for end-use assumptions supported by relevant studies before calibrating landscape/garden demands to match actual demand profiles over the calibration period (2018-22).

The modelling does not explicitly calibrate for existing Permanent Water Savings Rules (PWSR). However, any existing PWSR embedded into consumption behaviour forms part of the model's calibration. That is, the model assumes existing PWSR will continue and will not change over the pricing period, on the basis that there is no information that customers drawing water from the Melbourne system will be affected by more intense restrictions in this period, and that the Melbourne Desalination Plant is available for use. This is consistent with the *Greater Melbourne Urban Water and System Strategy*.

These are the key sources of data for the assumptions supporting the forecast:

- Growth forecasts (serviced dwelling and population forecasts): population information is derived from the ViF 2022 dataset and the process for determining dwelling count is described in an earlier section 7.6.
- Residential End Use Measurement study (REUMs 2018)
- Appliance Stock and Usage Pattern Survey (2021)
- Climatic data from the Bureau of Metrology's Essendon weather station for the central region and the Government of Queensland's SILO climate data across townships for the western region
- Historical quarterly and triannual billing data from Gentrack (central) and Aquarate (western) transformed into daily consumption using daily bulk water consumption from our systems (SCADA).

A price elasticity factor is not included in our water use demand forecasts due to the relative inelastic demand impacts of any price change and the challenges in measuring price elasticity for the separate regions in our service area.

Residential water use

Modelled iSDP outputs for litres per person per day (L/p/day) forecasts show a decline over time, in line with historical observed decline across the region since 2018, as shown in **Figure 17**.

With increasing urbanisation, we expect that water efficiency gains through in-house appliances and smaller garden sizes will result in a decrease from 147 L/p/day in 2022-23 to 140 L/p/day in 2027-28. We still anticipate L/p/day to be larger in the western region driven by larger lots and gardens. However, total residential potable water demand is forecast to grow driven by high growth in customer numbers.



Figure 17 Historical and forecast total litres per person per day

Total residential water use is forecast to increase from 77,160 ML in 2022-23 to 85,865 ML by 2027-28, an increase of 11.3% over the five years or 2.26% per annum as shown in **Figure 18** is driven by continued high growth in serviced dwellings and connections over the period even as L/p/day decline over time. Note this includes potable water volumes in lieu of recycled water volumes – we account for this in our retail sales.



Figure 18 Modelled residential potable water demand

Non-residential water use

Total non-residential water use is forecast to increase from 38.010 ML in 2022-23 to 42.614 ML by 2027-28, an increase of 12.1% over the five years or 2.4% per annum as shown in

Figure 19. Similar to residential demand, this is driven by continued high growth in serviced dwellings.



Figure 19 Modelled non-residential potable water demand

Non-residential customers are heterogeneous (vary in type, size and function) and therefore it is not practical to apply end use modelling. Rather, we divide non-residential customers into two groups: 'large' or high intensity users and 'typical users'.

The top 225 water consuming customers in the central region and the top 490 water consuming customers in the western region are considered high intensity users. **Figure 20** and **Figure 21** present historical non-residential demands between typical and large customers in central and western respectively.



Figure 20 Large and typical non-residential potable water demand – central



Figure 21 Large and typical non-residential potable water demand – western

Overall, non-residential potable water demand is forecast by multiplying the projected number of customers by the average use for that category of use (large or typical). We apply additional assumptions onto average consumption per connection for large customers discussed below and apply different averaging windows based largely on data availability, suitability and its reliability.

In the case of typical users demand per consumption (ML/connection):

- We apply a three-year pre-pandemic (2017-18 to 2019-20) averaging window to determine average typical consumption per connection in the central region. Average consumption peaked prior to the pandemic before significantly declining driven by restrictions impacting trading and closures specifically in the CBD and inner urban areas. Consumption has increased since the lifting of pandemic restrictions and we anticipate typical consumption per customer to return to prepandemic levels warranting the use of a three-year pre-pandemic averaging window.
- We apply a five-year averaging window (2017-18 to 2020-21) of recent consumption to determine average typical consumption per connection in the western region. Average consumption across that period has remained stable even through the pandemic and justifies the five-year averaging window as opposed to pre-pandemic window.

In the case of large users demand per consumption (ML/connection):

- We apply a five-year averaging window (2017-18 to 2021-22) of recent consumption to determine average typical consumption per connection in the central region. Large customers consumption in the central region have been slowly declining driven by increasing urbanisation. We further adjust the average consumption per connection (ML/connection) by 1% per annum due to the efficiency gains or closures of significant manufacturing plants due to urbanisation to align with the observed decline.
- We apply a four-year averaging window (2017-18 to 2020-21) of recent consumption to determine average typical consumption per connection in the western region. Unlike central, we did not have 2021-22 consumption readily

available for analysis. Large non-residential customers in the western region are mostly represented by agricultural businesses or heavy industries with these types of customer's demand correlating with population growth (as population increases, more food and goods are required). We therefore further adjust the average consumption per connection (ML/connection) by increasing it year on year in proportion with population growth.

Non-revenue water volume

The proportion of total water delivered defined as non-revenue water is assumed to be 10.0% for central and 10.4% for western. This has been calibrated based on a 5-year average window for central and western. However, we have excluded 2019-20 and 2020-21 from the central benchmark and instead used an additional two years of pre-pandemic years.

We have excluded 2019-2021 as outliers for the central region, primarily driven by the pandemic and our inability to accurately read meters across the region at the time. This under-stated our non-revenue water significantly in the pandemic years and hence excluded from our calibration averaging window to forecast long-term demand. The inclusion of the 2019-21 period would reduce non-revenue water as a share of total potable water demand to 8.8%, lower than long-term trends. We consider the inclusion of the high proportion observed in 2022-23 balances both the long-term view and higher than anticipated return post pandemic.

In the western region, we include pandemic years as it is consistent with our long-term observations. Although we observe a drop during the pandemic years, the rapid bounce-back higher than the long-term trend balances the level of uncertainty and volatility driven by the pandemic.

High and low demand scenario

Climate and population are known to have a significant impact on water use and were adjusted to take on values that represent high and low water demand. This approach to factoring climate and population is consistent with modelling used in the *Greater Melbourne Urban Water System Strategy*. Our adopted forecast (or P50) represents the same climate and population assumptions in the medium scenario for this strategy.

While population is from ViF projections, the high and low scenarios consider deviation of proposed population growth and associated per capita water consumption. Climate scenarios are consistent with the Victorian Government's climate guidelines (for a low, medium and high climate) based on the Intergovernmental Panel on Climate Change (IPCC)'s Fifth Assessment Report. Consistent with the IPCC's guidelines, all three scenarios use the Representative Concentration Pathway 8.5 (RCP8.5) and consider the range of results from the suite of Global Climate Models in the IPCC Report.

The result is a high and low scenario of our bulk potable water demand forecasts presented in. Our adopted forecast represents our P50 percentile forecast for bulk potable water demand as shown in **Figure 22**.



Figure 22 Total GWW potable water demand – high and low scenario

7.8 Bulk water supply forecasting

Bulk potable water demands in the area previously serviced by CWW is exclusively sourced from Melbourne Water.

Bulk potable water demands for the area previously serviced by WW are partially supplied and treated locally by GWW. To estimate our bulk water supply costs, we need to disaggregate this bulk potable demand to either Melbourne Water, our water stored in Southern Rural Water's assets, or water from our other smaller local sources. Where our water is supplied from is an important component of forecasting our controllable and non-controllable operating expenditure.

Our approach to forecasting bulk water supply

- For customers in the area previously serviced by CWW, our entire bulk potable water demand is equal to our bulk potable water supply from Melbourne Water. We forecast this using our end-use forecasting model the Integrated Supply-Demand Planning (iSDP) model.
- For customers in the area previously serviced by WW, most of our potable water is supplied by Melbourne Water and from water stored in Southern Rural Water's assets, with some supplied from local sources that we manage.

To forecast our bulk water costs in the western region, we first forecast our bulk water potable demands using a similar iSDP end-use forecasting model. We then use that demand forecast in a hydrological simulation model of our water supply and treatment network, built in eWater Source. The model disaggregates the total water demand and effectively forecasts how much water we need from each source to meet demand.

7.8.1 The Water Mass Balance Model – western region only

We use an integrated water mass balance model, developed using the eWater Source modelling platform, to disaggregate the bulk potable water demands for the western region to its sources.

The water mass balance model is underpinned by the iSDP demand outputs and a range of other climatic inputs. The model can be used to assess catchment yields, drinking water treatment and transfer volumes, sewage generation, sewage treatment, and recycled water generation and supply under different climate scenarios.

Modelled outputs from the water mass balance model are used to break down total water demand forecasts in the western region by source, as shown in **Figure 23**.



Figure 23 Breakdown total supply requirements in the western region

Combining this with modelled outputs from the iSDP model for the central region, we can establish bulk water demand and supply forecast by source and by use across the region.



Figure 24 Total water supply requirements for GWW



Figure 25 Total water demand by use for GWW

7.9 Bulk wastewater forecast

Melbourne Water charges us for wastewater volume and certain treatable loads delivered to their Western Treatment Plant (WTP). This section describes how we forecast the volume delivered to WTP.

Total wastewater delivered to WTP is forecast to increase from 96.3 GL in 2022-23 to 99.5 GL by 2027-28, an increase of 3.3% over five years. This is in line with the increase in water demand across mostly central and increasing reliance on WTP from the western region.

Overall, wastewater collected by us is delivered to a range of treatment plants including our own eight treatment plants and Melbourne Water's WTP. Most of our wastewater in the area previously serviced by CWW is treated at WTP and at our Altona Treatment Plant. Most of our wastewater in the area previously serviced by WW is treated locally at seven treatment plants, with a small proportion sent to WTP to meet growing demand.

Similar to our bulk water demand and supply forecasts, we forecast the total wastewater delivered to WTP from central and western regions separately.

7.9.1 Central region

Overall wastewater volume received by WTP and Altona Treatment Plant is derived from forecasting five key inputs:

- 1. Residential wastewater (commonly referred to as domestic sewage)
- 2. Trade waste from trade waste customers
- 3. Non-residential wastewater from non-residential customers
- 4. Rain dependent inflow (the volume of wastewater in the sewer that can be attributed to rainfall)
- 5. Groundwater infiltration (the volume of wastewater that enters the sewer through ingress).

Each of these inputs can vary independently of each other over time. Consistent with our approach in 2018 to forecast volumetric wastewater forecasts to WTP, historical contributions from each of the five inputs have been estimated. Modelled outputs for volumes to WTP are shown below.



Figure 26 Forecast bulk wastewater volumes by component to Western Treatment Plant (WTP) - Central region

7.9.2 Western region

Our wastewater volume forecasts for the area previously serviced by WW are a direct output of the mass balance model discussed in the bulk potable water demand section. The volume forecasts are the balancing volumes sent through an intercept sewer in Derrimut.

Forecast load volumes sent to WTP are forecast using benchmarked loads (g/person/day) and a population forecast for the area that can discharge to WTP (via our network in the central region).



Figure 27 Forecast bulk wastewater volumes by region to Western Treatment Plant (WTP)

7.10 Retail sales forecasts

This section describes the forecasts used to determine the volume of sales across our different retail products. This influences the prices our customers will pay.

7.10.1 Service connection forecast

As there are separate service charges for the central and western regions, we forecast service charges for central and western separately.

Residential water service connection charges are forecast to increase from 554,147 charges in 2022-23 to 643,100 by 2027-28. This is an increase of 16.1% over five years or 3.2% per annum on average. Service connections across both central and western are driven by the serviced dwelling forecast. We assume that dwellings are titled, occupied and connected in the year that they are forecast, and therefore would be levied a service connection in that year.

Connections are forecast using the current volume of service charges based on billing data rather than ESC customer numbers. Service charges from 2023-24 onwards are increased based on the growth for the region.

Non-residential service connections are escalated based on the non-residential serviced dwelling forecast noted above.

Potable and recycled water service connection fees in the western region vary depending on meter size. We have assumed close to zero growth for meters larger than 50mm (inclusive). Growth in service connections has predominantly occurred in 20mm to 40mm sized meter connections.

Customers in the central region are levied a private fire service connection charge. We have escalated this based on the overall total serviced dwelling growth rate for the central region.

From 1 July 2024 we will no longer charge vacant titled lots with services available but unconnected in the western region. This aligns with billing practices in the central region and is reflected in our service connection forecasts.

7.10.2 Potable water sales forecast

Potable water sales are derived directly from our bulk residential water use discussed earlier. Total residential water use is forecast to increase from 75,778 ML in 2022-23 to 85,193 ML by 2027-28, an increase of 12.4% over the five years or 2.25% per annum as shown in **Figure 18**.

To forecast potable water sales revenue, we remove any potable water used in lieu of recycled water volume sales, and then we determine the volume of water sold at different water usage fee steps. We are proposing to remove the third step in the western region, so that both regions will have the same number of water usage fee steps.

In the central region, the removal of the sewage disposal fee requires the introduction of a water-only usage fee, which also has two steps.

Water usage fees will be different for the central and western regions this regulatory period, so we need forecast volumes for both central and western regions.

Allocating water demand to usage steps - central

We apply a five-year average historical trend of the split between step 1 and 2 to the total bulk water residential potable water demand for central. We assume these splits between step 1 and 2 will stay relatively stable over the regulatory period given its stability over the past decade. We do not anticipate significant changes to customer behaviour that would deviate from the historical trend.

Forecasting water use only charges - central

We apply a five-year average historical split between the volume of potable water used by customers with only a water connection and those with both a water and sewerage connection to the total potable demands pro-rated to the 2 steps. Most of our customers (99%+) have both a water and sewerage connection. Similarly, we do not anticipate significant changes, given all new serviced dwellings are forecasted to include a sewerage connection.

The residential potable demands by step and connection for western are below.



Figure 28 Central region residential potable water demand by step and connection

Allocating demand to usage steps – western

We used a five-year historical average trend to estimate the volumes of step one and step two water sales. Usage in in the previous step three will now be in step two.

A recent shift of customers in the western region to quarterly billing will reduce the volume of water charged at a higher step, as step volumes were calculated each bill cycle. Using historical trends based on triannual billing will overstate the actual volume of water in the larger step. However, due to data unavailability, we are unable to establish a historical trend based on quarterly billing.

We anticipate over time western's step splits will converge to central's step splits with urbanisation and the shift to quarterly billing. However, due to uncertainty, we continue to apply the observed historical average as it is the best information available.

The residential potable demands by step for western are shown below.



Figure 29 Western residential potable water demand by step

Non-residential potable water sales

Retail non-residential potable water consumption forecasts are directly tied to the outputs modelled in the iSDP and water mass balance models given there are no steps.



Figure 30 Retail non-residential potable consumption forecasts

7.10.3 Sewage disposal sales forecast

Residential sewage disposal sales forecast

Our tariff reform proposal removes the sewage disposal charge in the central region.

As we no longer bill for residential sewage disposal volumes, we have not included a forecast here. We still forecast residential sewage disposal volumes as they are a key input into our bulk wastewater volumes sent to Melbourne Water's Western Treatment Plant.

Non-residential sewage disposal sales forecast

For billing non-residential sewage disposal, we estimate the volume of sewage discharged to the sewers for customers in the area previously serviced by CWW. This is because it is not cost effective to directly measure (meter) customers' sewage disposal. We use an established formula to estimate the volume of sewage disposed from a non-residential property, and these are set in detail in CWW's 2018 price determination.

We have taken a top-down approach, applying a non-residential sewage disposal factor based on historical billed non-residential volume of sewage disposed relative to the billed non-residential volume of water (including recycled water).

Specifically, we apply a discharge factor of 45.9% to total non-residential water demand to estimate sewage disposal volumes for the period.

Although the pandemic led to a slowdown of production and limited trading activity in 2020-21 and subsequently a drop in sewage volumes, the discharge factor has returned to pre-pandemic levels of about 44-45%. Given this, we propose to use a five-year averaging window rather than three-year. The change in sewage disposal volumes from 2014 to current as well as the forward forecast is shown in **Figure 31**.



Figure 31 Non-residential sewage disposal volumes – central region

7.10.4 Recycled water sales forecast

We supply customers in growth areas with Class A recycled water supply (purple pipe) for use in toilet flushing, gardening, irrigation and other suitable end-uses where available. Some new properties also have the option of using recycled water in their laundry.

As GWW, we continue to have separate charges for the central and western regions.xix

Residential recycled water sales are forecast to steadily increase over the regulatory period, reaching 580 ML per year in the western region and 700 ML per year in the central region by 2028. Non-residential recycled water sales will reach 550 ML per year, also in 2028.

Note our recycled water sales forecasts include potable water that is sent through the recycled water network in lieu of recycled water. These customers receive potable water through their purple pipe and recycled water meter but are charged the recycled water usage price. This volume is deducted from our potable water sales forecasts up to 2029-30. We are anticipating and communicating to customers in those areas with potable water in lieu of recycled water that they will begin receiving recycled water in 2030-31.

Residential recycled water sales

We forecast retailed recycled water demand using the recycled water service connection growth forecast and apply a historic average unit rate of consumption for residential and typical non-residential customers.

The forecast number of connections is directly calculated from the serviced dwelling growth forecast discussed earlier. We calculate the average recycled water unit rate consumption for each customer cohort using historic billing data.

Non-residential recycled water sales

For typical non-residential customers, care is taken to exclude any contracted, large outliers and open space volumes before calculating the unit rate consumption to avoid double counting. Large customers are modelled independently and then added in.

Open space recycled water demands are modelled similarly to residential and nonresidential demands. We multiply the historic unit rate consumption per open space connection by the forecast number of open spaces in the regions serviced by, or planned to be serviced by, recycled water. The forecast number of open spaces each year is back-calculated from the total planned number of open spaces given by Property Service Plans, with year-on-year growth proportional to dwelling growth.

Proposed change: Non-residential recycled water customers no longer on contracts - central

We are phasing out 'take or pay' contracts for large recycled water users in the central region, with most customers already moving to standard recycled water charges.

Unlike the previous price submission, we have included recycled water 'take or pay' customers in our recycled water volume forecasts.

For this price submission, we have included these contract customer volumes from 2024-25 onwards. Contract revenue associated with these customers are now recovered through standard recycled water charges.

Customers who receive recycled water from Altona Treatment Plant in the central region remain under contract and are not included in the standard forecast. Those customers form the majority of the recycled water contract revenue discussed in the non-tariff revenue section of this report.



Figure 32 Residential and non-residential retail recycled water consumption forecast - central



Figure 33 Residential and non-residential retail recycled water consumption forecast - western

7.10.5 Trade waste sales

Trade waste charges make up less than 5% of our revenue per annum. As GWW, we continue to have separate charges for the central and western regions.

Application and agreements

- Across central and western, we have forecast application (once-off) and agreement (annual) charges by their respective risk ranks using a line of best fit. Where there was no trend evident, we took an appropriate trailing average window for the forecast period.
- We also charge a service fee for each bed serviced by a macerator unit in the central region. These beds are usually situated in hospitals or aged care facilities. We have records of all historical and existing registered beds served by a macerator unit in its billing database. An extract of registered bed records from the system is tabulated and extended based on existing information around customer contracts to establish a forecast.

Trade waste volume and loads

Trade waste volumes and loads for the central region form part of our bulk wastewater forecast. Therefore, we undertake a more rigorous forecasting approach in the central region relative to the western region.

For trade waste volumes and loads in the central region:

- The forecast methodology applies the same approach used in our 2018 price submission, which was developed under a joinst forecasting program with the other metropolitan businesses.
- The approach requires forecasting individually two key cohorts:
 - the largest trade waste contributors (top 17)
 - \circ the remaining customers be forecasted together as `segments.'xx
- Historical loads and volumes are segmented by discharge treatment plant (WTP or ATP) and used to forecast volumes and loads for each customer segment and discharge treatment plant. We do this by:
 - establishing a line of best fit to the trade waste volume historical data (by segment and treatment plant) and using this to establish a forecast trade waste volume (when a trend was evident in historical data)
 - calculating a five-year average of historical load quality concentration to set a benchmark for forecast load quality into the next two regulatory periods
 - escalating trade waste load qualities based on the forecast trade waste volume multiplied by the five-year average historical concentrations of contaminants to establish forecast trade waste load quantities.
- Top 17 customers have their contributions individually forecasted and included in the final forecast.

For trade waste volumes and loads in the western region:

• Following the approach adopted in our 2020 price submission, historical loads and volumes (sourced from the billing system) are escalated by the forecast growth in sewerage volumes as determined by the mass balance model.

7.10.6 Other miscellaneous retail products and services

Forecasts for our other retail products vary given the nature of each charge.

For most of our top miscellaneous retail products and services, we have used an average of the past three – five years as the forecast demand for these services. This is to account for the volatility of these services, in particular with the impact of the pandemic on building and development.

For other fees directly tied to growth, we have applied either our overall growth rate or applied the region-specific growth rate.

Supporting documents for setting our prices:

- PS24 Demand forecasting technical paper
- Demand forecasting model

8. Performance through integration and growth

This section provides information supporting our PREMO self-assessment.

Summary

- We are reporting performance on commitments made as CWW and WW which were set based on different price submissions.
- We mostly met our CWW and WW customer outcomes and have explained any shortcomings transparently to customers over 2018-23 in the ESC's outcomes report.
- We have seen improvements in the perception survey findings and were consistently on par with other retailers and the Victorian average.
- We delivered most of our top 10 major projects in central and some in western, with the remaining deferred due to integration and a population shifts during the COVID-19 pandemic.
- Our operating and capital costs were above determination benchmarks but have remained stable per connection and are comparable to similar businesses.
- Our PREMO self-assessed rating for Performance is 'Standard.'

We completed a comprehensive review of our performance against the ESC's guidance, relating to:

- our customer outcomes
- ESC's customer perception survey
- our major project delivery
- our expenditure performance against determination benchmarks.

This included reviews of our internal surveys of customers and external reports from Water Services Association of Australia (WSAA) to demonstrate our performance against our peers.

8.1 Customer outcomes

We self-assessed the delivery of our customer outcomes as amber (on track) for the area previously serviced by CWW and green (met) for the area previously serviced by WW.

We broadly met most of our measures for the six outcomes that CWW set across the regulatory period. However, we felt we could have done better in some areas. We met most of our measures for the five outcomes that WW set across the regulatory period.

Since 2018-19, we have reported to the ESC annually and reported to our customers twice a year on our website.^{xxi} Our customer report is a simplified and designed version of the report we submit to the ESC. In its recent outcomes report, the ESC recognised our high bar for self-assessment of our performance and also noted our report is easy to read and included thorough commentary for each measure.^{xxii}

8.1.1 City West Water customer outcomes

Table 56 presents the six customer outcomes that represented what mattered most to customers previously serviced by CWW for 2018-24. A set of 41 measures has been used to assess our performance in delivering our outcomes.

Table 56 City West Water custo	omer outcomes performance
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	2018-19	2019-20	2020-21	2021-22	2022-23	Overall
Services to my home and business are safe, reliable and efficiently managed	On track	On track	On track	On track	On track	On track
Customer service is accessible and my enquiries are resolved promptly	Met	Met	Met	Met	On track	Met
Billing and payment options are efficient and convenient	Met	Met	On track	Not yet met	Not yet met	On track
Customers in hardship are supported	Met	On track	Met	Met	On track	Met
The whole of the water cycle is managed in an environmentally sustainable way	Met	Met	Met	Met	Met	Met
We are a valued partner in servicing a growing Melbourne	On track	On track	On track	Met	Met	Met
Overall	Met	On track	On track	On track	On track	On track

As an 'advanced' rated price submission, we set ourselves stretch targets to achieve by the end of our regulatory period. Despite the challenges presented by the high growth, pandemic impacts, and integration, we largely met the customer outcomes proposed in CWW's 2018 price submission. We fell short on measures that were directly impacted by the pandemic or integration that were unforeseeable and outside of our control at the time of our 2018 price submission.

We met and/or exceeded in:

- delivering safe and compliant potable water to our customers at all times with a high level of satisfaction on water quality and ensured no customers received extreme levels of water and sewer interruptions. (outcome 1)
- delivering reliable sewerage services and responding quickly to sewerage incidents (outcome 1)

Performance through integration and growth

- responding to calls quickly and resolving issues upon first contact with all correspondence responded to within 1 business day and over 95% of calls resolved upon first contact (outcome 2)
- supporting our customers through tailored hardship provisions (outcome 4)
- managing our treatment and disposal of sewage in a safe and compliant manner with our emergency relief structures consistently compliant and no EPA discharge non-compliances (outcome 5)
- limiting the impacts on the environment by reducing emissions towards our net zero emissions targets (outcome 5)
- securing future water resources and improving community amenity and wellbeing by funding 14 stormwater partnerships to the community (outcome 5)
- supporting a growing Melbourne by improving application turnaround times and information for developers (outcome 6).

We fell short in:

- Responding and rectifying as fast as we had set to water supply interruptions however, we still managed to rectify 95% of all planned interruptions within 5 hours over the period (outcome 1). By 2022-23, we saw an increase in the number of complex burst and leaks which took more than five hours to repair. We are currently reviewing our asset management plans to target areas at greatest risk of interruptions and investing in proactive and renewal programs so interruptions do not become more frequent.
- Ensuring customers were satisfied with our services when we responded to an enquiry or complaint (outcome 2). We saw a decline in customer satisfaction in 2022-23 driven about concerns about being able to pay for bills with a rise in complaints relating to financial pressures on households and small businesses. Staff retention also exacerbated poorer customer satisfaction to our responses due to slower response times. We are currently working on a new billing system that will give customers more control over their bill but also allow for staff to provide more direct customer support. We anticipate customer satisfaction to improve over time as we increase our capacity to better provide customer support.
- Ensuring our billing and payment options were simple, efficient and convenient including accurately measuring our customer's meters (outcome 3). We saw the number of estimated meter reads increase dramatically in 2019-20 to 2021-22 driven by the pandemic and restrictions. Subsequently we observed a rise in payment and bill complaints after the pandemic driven by the corrections to bills as we were able to read meters accurately as well as the increase in complaints in 2022-23 due to financial pressures noted above. We also paused active promotion of our online accounts functionalities as we integrated and rescoped our billings replacement system. We anticipate that we will return to the low pre-pandemic levels of estimated meter reads for billing purposes. We also anticipate that as we roll out our new billing system, we will deliver better billing and payment experiences for our customers.
- Ensuring we limited water loss from our network (outcome 5). We observed an increase to water loss from our network by 2022-23, which was driven by ageing customer water meters within our water supply network. Replacement of these meters has been delayed and has contributed to a higher than expected water loss. We are ramping up our meter replacement program to target our oldest meters as a priority. We continue to develop and improve our asset management plans, plan and
construct water main renewals, trial leak detection technology, and undertake targeted leak surveys. We are also working with Melbourne Water to ensure measurements at our bulk meter points are accurate. These actions will allow us to reduce the volume of water loss from our network over time.

We self-assessed our overall performance on our outcomes for the entire regulatory period as amber.

8.1.2 Western Water customer outcomes

Table 57 presents the five customer outcomes that represented what mattered most to customers previously serviced by WW for 2018-24.^{xxiii} Underpinning our customer outcomes were a set of 21 measures used to assess our performance.

	2018-19	2019-20	2020-21	2021-22	2022-23	Overall
Fair and affordable charges for all customers	Met	Met	Met	Met	Met	Met
Reliable, safe services to existing and new customers	Met	Met	Met	Met	Met	Met
Innovative approaches to addressing customer needs	Met	Met	Met	Met	Met	Met
Care of the environment	On track	On track	On track	On track	Not yet met	Not yet met
Sustainable contribution to the community and regional liveability	Met	On track	Met	Met	On track	On track
Overall	Met	Met	Met	Met	Met	Met

Table 57 Western Water customer outcomes performance

Despite the challenges presented by the COVID-19 pandemic, our integration to form GWW and the high growth in our service area, we largely met the customer outcomes in WW's 2018 and 2020 price submission.

As a 'standard' equivalent rated price submission, we set ourselves achievable targets to meet by the end of our regulatory period. We met most of our targets and fell short of measures that were directly impacted by the COVID-19 pandemic and our integration

that were unforeseeable and outside of our control at the time of our 2018 price submission.

We met and/or exceeded in:

- reviewing our tariff structures and ensuring customers were consistently satisfied that our services are value for money (outcome 1)
- supporting our customers through tailored hardship provisions to clear outstanding debt with over 40% of hardship participants clearing outstanding debt by 2022-23 (outcome 1)
- delivering safe and reliable water and sewerage services and responding quickly to incidents when they occurred (outcome 2)
- delivering and promoting different approaches to communicate and interact with us even as we slowed down promotion due to the rescoping of the billing and collection system (outcome 3)
- limiting the impacts on the environment by reducing emissions in line with our net zero targets (outcome 4).

We fell short in:

- Managing our treatment and disposal of sewage in a safe and compliant manner with a high number of sewer spills occurring over the period driven partially by La Nina conditions (higher rainfall leading to greater likelihood of spills from overflows) (outcome 4). We anticipate that as we most likely will enter El Nino conditions, the risks to spills from our treatment plant will reduce. We are also undertaking significant investment across our treatment plants to further reduce the risk of sewerage spills to the environment.
- Reaching out to our communities by providing educational presentations to promote water efficiency and resiliency (outcome 5). We did not provide as many educational presentations over the COVID-19 pandemic driven by our inability to attend schools in persons. With integration, we further extended our program to promote water efficiency across schools in the central region. Our reported figure in 2022-23 represents the number of schools in the western region, and does not include the number of schools in the central region that received educational presentations from us. We continue to provide educational presentations to promote water efficiency across our service region as GWW.
- The volume of recycled water re-used in our networks due to La Nina weather conditions driving down reliance on recycled water (outcome 5). We anticipate that as we most likely will enter El Nino conditions, recycled water re-use will increase across our network.

We have self-assessed our overall performance on our outcomes for the entire regulatory period as 'green'.

8.2 Customer perception

Customer perception of water businesses is tracked and surveyed by the ESC through its quarterly Water Customer Satisfaction Survey. The survey asks customers:

- How would you rate your water/wastewater provider on delivering value for money?
- How would you rate your trust for your water/wastewater provider?
- How would you rate your water/wastewater provider's reputation in the community?

 How would you rate your satisfaction with your water/wastewater provider as a service provider overall?

Our 12-month rolling average, results as CWW, WW and subsequently GWW, are plotted against the state average and a half-standard deviation interval band below in addition to evidence from internal and external surveys.^{xxiv}

ESC customer perception survey	July 2017 – March 2018	August 2022 – May 2023	On par with state average
Overall satisfaction	6.1	6.4	√
Trust	6.1	6.5	\checkmark
Reputation	6.1	6.3	√
Value for money	5.6	6.0	\checkmark

Table 58 Summary of our customer survey findings

8.2.1 Customers were increasingly satisfied with how we interacted with them

We have consistently scored close to the state-wide average in the ESC's perception survey on overall satisfaction, with our scores improving from approximately 6.1 to 6.4 out of 10 over the 2018-23 period.

While there has been a recent decline, this is consistent with other water business across the state possibly driven by external factors. Further our performance indicators remain higher than they were at the beginning of the regulatory period.





Our internal surveys support the ESC's perception survey findings with satisfaction for customers previously serviced by CWW and WW improving since 2018-19 up to 2021-22, with an observed decline in 2022-23.

Most customers (about 86% of GWW residential customers interviewed in 2022-23) were satisfied overall with the service they received in the last 12 months, with satisfaction attributed to responses to enquiries, complaints, ease of information and staff courtesy. Dissatisfaction across all customer segments was mainly driven by price, reflective of the current cost of living pressures customers are experiencing. We observed a similar small decline in 2022-23 consistent with the ESC's perception survey findings.



Figure 35 Internal survey on overall satisfaction - central and western

The early gains in the ESC's perception survey are reconfirmed in WSAA's biennial customer perception survey with our customers general satisfaction improving and on par with similar businesses across Australia.



Figure 36 WSAA survey on overall satisfaction - central and western

8.2.2 Customers increasingly trusted us as a reliable service provider

We have consistently scored close to the state-wide average in the ESC's perception survey on how customers perceive us with our scores improving from approximately 6.1 to 6.4 out of 10 over the 2018-23 period.





Although we do not test for trust in our internal surveys, the early gains in the ESC's perception survey are reconfirmed in WSAA's customer perception survey, scoring similar to other businesses across Australia.





8.2.3 Customers continue to view us positively

Our customer reputation improved over the period in line with state-wide averages with our scores improving from 6.1 to 6.3 out of 10 over the 2018-23 period.

While there has been a recent decline, this is consistent with other water business across the state and possibly driven by external factors. Despite the recent decline, our

performance indicators are currently higher than they were at the beginning of the regulatory period.





Our internal surveys support the ESC's perception survey findings, with customers perceiving the business as a valuable member for the community.

Most customers (approximately 75% residential in 2022-23) considered GWW, as a valuable member of the community. We have observed a small decline on customers perception on GWW as a valuable member of the community, in line with ESC's perception survey findings, however broadly, customer who perceive us negatively have not changed considerably.



Figure 40 Internal survey on valuable member of the community - central and western

The early gains in the ESC's perception survey are reconfirmed in WSAA's biennial customer perception survey with customers perception on our reputation improving and on par with similar businesses across Australia.



Figure 41 WSAA survey on reputation - central and western

8.2.4 Our customers considered us value for money

High growth, pandemic impacts and integration activities drove higher spending than anticipated but customers considered us value for money over the period. This is in line with state-wide averages, with our scores improving from 5.6 to 6.0 out of 10 over the 2018-23 period. We have observed a decline in line with the state average, which we attribute to the current cost of living pressures our customers are experiencing.





Our internal surveys support the ESC's perception survey findings with customers considering our services are value for money.

The majority of residential customers (approximately 62% of customers in 2022-23) considered GWW services, to be value for money. These findings are consistent with the ESC's perception survey including the decline observed in 2022-23.



Figure 43 Internal survey on value for money - central and western

The early gains in the ESC's perception survey are reconfirmed in WSAA's biennial customer perception survey with our customer's views on value for money improving and on par with similar businesses across Australia.



Figure 44 WSAA survey on value for money - central and western

8.3 Expenditure performance

8.3.1 Controllable operating expenditure performance

GWW has exceeded its determination allowances across the 2018-19 to 2022-23 regulatory period by \$71.5 million. This is equivalent to a 7.9% increase and is slightly higher than what was observed in the in the 2023 price submissions of 5.8% overspend..^{xxv} Section 4.2 and Appendix H provide a detailed analysis of our operating expenditure performance and planned efficiencies.

The 2018 CWW and 2020 WW determinations did not consider the costs associated with integration on 1 July 2021. These costs account for some of the increase in operating expenditure. Transformation programs, changes in obligations and external cost drivers make up the remainder. Controllable operating expenditure per connection has increased from \$326 in 2018-19 to \$341 in 2022-23.

Changes to operating expenditure over the current regulatory period (2018-23) is grouped into four categories:

Costs associated with the integration of CWW and WW

These costs are mostly administrative, including, consolidation of back-end systems (such as payroll, HR, and finance), import data and retire the unused system. Workforce management savings, as the predecessor businesses both had executive management and a board, could be achieved almost immediately and through natural attrition.

Costs associated with adding value and transforming our operating expenditure programs

The integration required investment in systems and processes. The transformation program includes expenditure that GWW considered optimal (efficient) in the long run to upgrade its operations, respond to regulatory requirements and maintain or improve service levels. The key transformation programs included, safety uplift, transforming customer services, managing compliance, increased focus on asset management and streamlining corporate functions.

Changes in obligations

Since 2018-19, GWW has experienced several changes in obligations including payroll tax increase by 0.5 %, superannuation increase to 11% by 2023-24, increases in Traditional Owner and First Nations government policy commitments, increase in requirements on GWW to respond to changes in *Security of Critical Infrastructure Act 2018* and state and federal Government Cyber Security requirements.

External cost drivers

These are costs that GWW incurred to maintain the service levels, where costs had increased above allowances (adjusted for inflation), and the activities undertaken were efficient and prudent. This includes increases in energy, IT licence fees and operations and maintenance cost increases in unit rates and safety requirements.

	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Determination	177.5	176.5	180.3	183.1	184.1	901.5
Actual	176.3	185.3	195.8	205.8	209.6	973.0
Variation (\$)	-1.1	+8.8	+15.6	+22.7	+25.5	+71.5
Variation (%)	-0.6%	5.0%	8.6%	12.4%	13.8%	7.9%

Table 59 Total controllable operating cost performance over 2018-23 (\$million, 2023-24)

8.4 Capital expenditure performance

Our actual total capital expenditure across the 2018–23 regulatory period was 24.9% higher than anticipated in our determination benchmarks.

We attribute our capital expenditure variation to:

- Higher than forecast customer growth, particularly in the western region, leading to infrastructure being brought forward.
- The previous Western Water price submission underestimated the capital expenditure required to service the higher than expected growth and meet compliance requirements.
- substantial increases to unit rates across all capital works driven by supply chain challenges and aging infrastructure.
- aging infrastructure (parts of our network are over 100 years old in the inner CBD region) requiring significant increased renewals to maintain reliability to these highly urbanised and high risk areas.
- high developer reimbursements driven by location and scale of developments.
- New systems needed to support integration, for example additional expenditure required for the billing and collections system to accommodate data from two businesses rather than one.

At the time of our previous price submissions, the major projects listed in section 8.5 represented approximately 25% of our total determination capital expenditure spend over the current regulatory period. Our overall actual capital expenditure spend includes a broad range of projects that were brought forward or had increased in scope due to the cost drivers discussed above. For example, we installed additional capacity at our Melton Recycled Water plant and installed a large water main (Rockbank Road) to service the Melton region. These projects were required in response to high growth combined with ageing assets, which resulted in insufficient capacity.

	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Determination	227.6	234.2	226.6	217.6	222.4	1,128.4
Actual	230.1	274.5	286.8	281.4	336.4	1,409.1
Variation (\$)	+2.5	+40.3	+60.2	+63.8	+114.0	+280.8
Variation (%)	1.1%	17.2%	26.5%	29.3%	51.3%	24.9%

Table 60 Total capital cost performance for 2018-23 (\$million, 2023-24)

8.5 Major project delivery

For CWW and WW, and subsequently GWW, the impacts of material and labour shortages caused by the pandemic, disruption to the supply chain and the high volume of construction work in Victoria, resulted in capital delivery market challenges in the second half of the regulatory period.

The pandemic shifted the scale and location of growth in Victoria – slowing down growth in key fronts. As a result, we deferred some projects until growth in these areas triggers the need for change.

Our integration to form GWW changed the scope of works relating to internal systems and assets. Sharing assets and better manage our network allowed us to delay or defer some works.

Despite these challenges, we have completed some of our capital works with the remaining on track to be completed.

Table 61 Summary of WW and CWW major projects (\$million, 2023-24)

City West Water	Western Water
7/10 projects completed	3/12 projects completed
2/10 projects deferred	2/12 projects deferred or cancelled
The second half of the Ravenhall outlet sewer has been deferred due to slower than anticipated growth. The existing upstream network has sufficient capacity to cater for the current growth and will be constructed by 2029-30.	Derrimut diversion sewer pump station and rising main has been deferred due to lower than previously forecasted demand and impact of wet weather events on inflows and infiltration was less than expected. Will be constructed in 2029-30
Tarneit West outlet sewer has been deferred due to lower than previously forecasted demand and impact of wet weather events on inflows and	Melton recycled water treatment plant conversion of its existing tanks to integrated fixed film tanks have been cancelled. The project was resconed to rapidly

lower than previously forecasted demand and
impact of wet weather events on inflows and
infiltration was less than expected. The project is
now deferred but expected to be constructed in
2030-31.its existing
been cance
meet dema
package of
construction

Melton recycled water treatment plant conversion of its existing tanks to integrated fixed film tanks have been cancelled. The project was rescoped to rapidly meet demand from Melton by including a larger package of upgrades and to better align with the construction of the Western Irrigation network. Two new tanks will be fitted with membrane reactors to

City West Water	Western Water
	be delivered in 2026-27 followed by an additional two tanks in 2028-29.
1/12 project ongoing or delayed	7/12 ongoing or delayed
Original billings and collection system replacement has been delayed as the scope of the system	Western Irrigation Network stage 1 is expected to be completed in 2023-24 on time.
replacement changed significantly with integration but is ongoing and expected to be completed in 2023-24.	Melton South sewer pump station and rising main sewer delayed due to a change in scope to improve accessibility for maintenance and expected to be completed 2023-24.
	Beattys Road trunk water main has been delayed to better match the rate of development in this region and to better align with the construction of a major upgrade of Beattys Road. It is expected to be completed in 2023-24.
	Sunbury outfall sewer duplication has been delayed due to additional engagement requirements with relevant authorities.
	Gisborne recycled water plant – stage 1 bioreactor upgrade has been delayed to include a 2-year operations and maintenance period and an extended procurement period. We are on track for delivery in 2026-27.

Bacchus Marsh to Melton recycled water plant interconnector has been delayed given the extended period of time to obtain environmental approvals. The interconnected is expected to be completed in 2023-24.

The Sewer Spill Prevention Strategy - Sewer Relining program is annual and ongoing - it is constantly reviewed and optimised to enable significant sewer rehabilitation within budget limits.

12.5% (\$15.4m) over PS18 allocated budget 13.5% (\$20.9m) below PS20 allocated budget

Supporting document for Performance:

• Detailed performance report

9. Management

This section provides information supporting our Management PREMO self-assessment.

Summary

- Our board and executive were actively involved in the development of the price submission and customer engagement program.
- We implemented a board attestation process which provided the board with a strategic and technical overview of the price submission development to provide guidance.
- We acknowledge there were limitations in GWW's first price submission, including the quality of data and sought specialist external support to ensure all plans and management show prudent and efficiency expenditure.
- Our PREMO self-assessed rating for Management is 'Standard'.

9.1 Executive and board governance

The price submission has been developed with the full executive as the project steering committee, meeting monthly to review progress, discuss strategic direction and endorse key directions ahead of discussing with the GWW board over an 18-month period.

The executive and board were informed and involved in the price submission development through:

- a standing agenda item for price submission updates
- dedicated board strategic speaker sessions to speakers with relevance to the price submission, including the Essential Services Commission, Environment Protection Authority, Deputy Secretary of Department of Environment, Energy and Climate Action, Energy and Water Ombudsman of Victoria, and Customer Advisory Group representative
- dedicating the 2022 board strategy day to price submission discussions
- dedicating executive strategy day to price submission discussions
- monthly price submission update meetings with the executive
- including longer agenda items where deeper discussions were needed, relating to risk management considerations for operational expenditure and capital program prioritisation
- independent attestation consultants, who provided regular updates on submission progress, risks and alignment with guidance.

The board and members from the executive observed and participated in our customer engagement program, with directors attending the deliberative panel sessions and the Chair attending with the Managing Director to receive the panel's recommendations.

9.2 Attestation assurance program

To support the delivery of the 2024 price submission an Attestation provider was engaged, acting as an external challenger to whether GWW has provided its best offer, and whether it has provided adequate justification for its proposals and strategies to

Management

align with the ESC PREMO requirements. The Attestation process included five review stages:

- **PREMO stage 1** review provided a detailed gap analysis of project plans, governance structures, ambition, and current progress across the key workstreams. This identified gaps where GWW needed to increase efforts or realign ambition with a PREMO self-assessment report provided to the board for discussion.
- **PREMO stage 2** review provided a high-level review of progress made since stage 1 and an interim PREMO assessment to ensure GWW had implemented advice. A report was provided to the board for discussion.
- **Capital program review:** the price submission 2024 combined two capital programs from our legacy businesses. We sought additional assurance support to ensure our combined capital program met the ESC requirements and demonstrated prudent and efficient expenditure, within our next operating context. The stage included a review of:
 - \circ $\;$ the capital program prioritisation process
 - o capital forecasts
 - $_{\odot}$ $\,$ top 10 major project business cases and program justifications.
- **Detailed review of regulatory models:** the review ensured the models produced output results as intended with no obvious material flaws and reviewed the logic and integrity to ensure that the calculations are arithmetically correct, and the results are reliable, accurate and consistent with the assumptions contained within the models.
- **PREMO stage 3 report** reviewed all final documentation and regulatory models to provide the board with the confidence to attest to the quality and accuracy of its 2024 price submission and a final PREMO assessment report was provided to the board for discussion.

The Attestation program was designed in combination with the board, which agreed to support its ability to provide attestation and apply an additional layer of assurance with regulator update reports and discussions.

9.3 Management of expenditure

Our goal is to deliver trusted water services in support of public health and affordable bills for our customers. We do this by efficiently managing our assets over the short, medium and long term, meeting compliance obligations and customer expectations. This price submission seeks to recover prudent and efficient costs and acknowledges that current expenditure profiles are not sustainable over the long term.

We will invest in programs that deliver long-term efficiencies that can be passed on to customers towards the end of this regulatory period (2026 onwards) and continue in the following periods.

We propose an operating expenditure efficiency target of 3% (average over the regulatory period: 2024-25 to 2027-28), which is sustainable given our expected average customer growth of 2.8% over the same period. Over the regulatory period, our operating costs will decline as we realise the efficiencies of the integration and the capital investments we make. More detail on proposed operating expenditure is outlined in Section 4.2.

Management

We have adopted a prudent and efficient capital plan for the forthcoming regulatory period. We have accepted risk on behalf of our customers and have reduced our proposed capital spend for the regulatory period (including 2023-24) to \$1.7 billion. We have done this by removing uncertain projects and prioritising capital plans.

Our capital projects and programs are supported by business cases and have been through a thorough review process, including review of underlying inputs and assumptions. Our business cases and program justifications show that our investments are required to deliver on our customer outcomes and support the recommendations of our deliberative panel. This is outlined in detail in Section 4.1.

We have also removed all projects for transfer assets that we are discussing with partner organisations. These conversations and collaboration across the water sector are supported by the recently signed Managing Director Accord. The Accord supports cross-sector collaboration to improve benefits to all customers by investing efficiently and planning to deliver projects that align to the Accord priorities shown in **Figure 45**.



Figure 45 Accord priorities

9.4 Quality of data inputs

Demand and growth forecasts are well documented and supported through Section 7.6, as well as the Demand forecasting technical paper. These have been independently reviewed and improvements made accordingly.

The building block model and tariff models have been reviewed for quality assurance through a three-step review process.

Data on operating expenditure has used audited data from statutory and regulatory accounts, as well as GWW's finance system.

Cost build ups for capital expenditure have used P50 estimates. For large business cases we have developed probabilistic cost estimates using Risk software. For determining network infrastructure requirements, we have used growth forecasts along with hydraulic and integrated hydrological models. For determining treatment plant

infrastructure requirements, we have used growth forecasts and Master Plans developed by specialist consultancies that identify specific upgrades based on asset condition, EPA licence requirements and required treatment capacity.

Engagement data used in this submission is supported by detailed reports from each engagement stage, showing qualitative and quantitative results of the engagement.

Performance against outcomes uses GWW data on service interruptions, as well as data sourced from ESC customer perception surveys.

Supporting documents for Management:

- Board assurance and engagement program
- PREMO stage 3 Executive summary
- Board deep dive sessions Operational and Capital forecasts papers

10.Risk

This section provides information supporting our Risk PREMO self-assessment.

Summary

- Our risk management policies and procedures are consistent with the principles of ISO 31000.
- The board and executive had extensive involvement in risk discussions.
- Our regulatory risk assessment has been guided by GWW's enterprise risk framework and corporate and strategic risk registers to ensure we balance risk between GWW and our customers fairly, with robust mitigation activities to maintain stable bills and meet service levels.
- A refreshed GSL scheme better balances risk and cost between customers and GWW.
- Our PREMO self-assessed rating for Risk is 'Standard'.

10.1 Risk management framework

GWW takes a comprehensive approach to risk management and has extensive governance processes to ensure risk is managed proactively and mitigated in line with our Risk Appetite Statement, which appropriately balances risk between the business and our customers.

The GWW enterprise risk management framework includes principles, roles, responsibilities, culture, processes, and activities which, when combined, create an environment for holistically and effectively managing risk across our business.



Figure 46 Enterprise risk management framework

Our risk management framework includes nine risk categories to ensure we are focused on addressing critical risk, legal obligations and possible impacts to our business and customers:

1. Compliance with Legal/Regulatory Obligations (Compliance): non-compliance with legislation, industry codes or regulations, or breach of duty of care.

Risk

- 2. Customer: impacts to customer services including customer service communication channels, billing/meter reading, increasing customer complaints, information statement applications or credit disruptions.
- 3. Environmental and Cultural Heritage (Environmental): contamination, disruption or destruction of the natural and cultural environment, including the preservation of local ecosystems and cultural heritage sites.
- 4. Financial: unplanned increases in operational expenditure, capital expenditure or gifted assets or unplanned decreases in revenue.
- 5. Health, Safety and Wellbeing: impacts on the physical and mental health, safety and wellbeing of employees and contractors.
- 6. Public Health: impacts on public health, including the provision of basic services such as clean water, sanitation, and health care.
- 7. People and Culture: impacts related to GWW employee engagement and capability, industrial action, loss of key talent and staff resignations.
- 8. Reputational: the organisation's reputation, public image and the level of trust it inspires in community and stakeholders.
- 9. Service Delivery: delivery of core services including water supply and sewerage services to meet the needs of customers and service standards.

10.2 How GWW manages risk

Effective risk management is about dedicating time to make informed decisions and planning for uncertainty. GWW achieves this using the following tools:

- A three lines governance model to assign accountability, actions, assurance and advice on the responsibility of managing risks and opportunities to support organisational resilience.
- A robust risk governance framework that incorporates:
 - Risk Management and Audit Committee (RMAC) a subcommittee of the GWW board
 - Business Risk Committee a committee comprising the full executive and supported by internal and, where appropriate, external risk professionals. Corporate risk registers for strategic and operational risks, which ensure board and management risk discussions are targeted and focused.
- A fully updated board-approved Risk Appetite Statement, which ensures we are focused on managing critical risks effectively and positioned to take advantage of opportunities through improved risk artifacts, including a formal Risk Appetite Statement set by the board.
- Risk management policies and procedures consistent with the principles of ISO 31000.
- An asset management framework consistent with the principles of ISO 55000.
- An asset risk management model.

10.3 How GWW is considering climate change risks

Climate and environmental risks span the whole GWW business, including the way we plan, build and maintain assets, source water and manage our people during extreme events. Climate and environmental risks are embedded into planning. Our 2030 Strategy has clear links to climate change adaptation and mitigation across all three

outcome areas: customers, community, and Country. Climate change and environment is identified as one of six strategic risks for the business.

Climate change resilience risk assessments inform our Climate Change Resilience Plan, which will be released this year. The plan will internally explore how we will:

- become less reliant on climate-dependent water resources for drinking water
- shift away from reliance on drinking water for end uses that don't need water of that quality and increase the use of stormwater and recycled water for irrigation and industry
- increase resilience through capacity and/or redundancy in sewer and water networks
- change infrastructure standards to make them more resilient to the effects of climate change
- increase capability and capacity of incident responses, for example, to bushfires and floods and planning for a changing climate
- make climate-related financial disclosures.

The Climate Change Resilience Plan will be delivered in the regulatory period through operational expenditure and aligned with our 2030 Strategy. The plan supports the commitments to climate change initiatives and collaboration across the water sector in the Central and Gippsland Region Sustainable Water Strategy (CGRSWS) and Greater Melbourne Urban Water and System Strategy (GMUWSS).

10.4 How GWW considered risk for the 2024 price submission

Through each stage of the price submission development, GWW executives and the board considered risk. This included deep dives into operational and capital expenditure programs, identifying the capital and regulatory risks being addressed, residual risks and mitigation activities. Section 44 describes our operating expenditure and associated risks and capital expenditure prioritisation process and how risk was considered in detail.

GWW undertook a regulatory risk assessment to identify risks which, if not sufficiently managed, could impact on the services our customers receive and the prices they pay. This includes external factors, which we cannot control but we can minimise impacts through mitigation activities. The risk assessment identified our strategic regulatory risks for this price submission and informed our review of management and mitigation options and consideration of how to allocate residual risk between the business and customers.

GWW's strategic regulatory risk assessment ensures we are prioritising long-term solutions that will deliver efficiencies, rather than short-term band-aids. We have done this through the following actions:

• Capital program

 Removal or delay of uncertain projects from the capital program. GWW accepts the financial risk if currently uncertain projects need to be accelerated and delivered this regulatory period, and customers benefit from lower prices. This includes projects where timing or cost are uncertain, where benefits are yet to be fully defined or justified through business cases. GWW holds the risk on behalf of our customers.

 Adaptive planning program, business planning and embedding the riskbased capital prioritisation process into the way we work to ensure our program is deliverable reducing the risk to customers.

Service delivery GSL scheme (not gold plating)

- A new GSL scheme that better balances risk between customers and GWW, ensuring that we deliver services for the majority and compensate customers where we are not meeting service levels. The scheme extends the existing central region GSL scheme to the western region, expanding guarantees to all customers. GWW will absorb all costs of the scheme.
- A new water quality GSL.
- Long-term future
 - Implementing actions from the GMUWSS and CGRSWS, which support water security, resilience, and climate change.
- Regulatory
 - Operating expenditure efficiency target of 3% per annum on average
 - Tariffs and cost pass through mechanisms that balance the risk of uncontrollable costs between GWW and customers through the period.
 - Demand forecasts that consider climate change, variability and COVID-19 impacts.

10.5 Price submission 2024 regulatory risk summary

Appendix B provides a summary of the strategic regulatory risks identified for the regulatory period. These are risks that, if not mitigated, may affect the services we provide to customers and what customers pay.

Our regulatory risk assessment identified eight risk categories. A summary of the eight risk categories and the risk allocation between GWW and our customers is outlined below:

- **Operating expenditure:** GWW has a sustainable efficiency program underway, with full support of the executive and the board, but if the risk category is realised GWW bears the risk.
- **Capital program:** GWW has put in place measures to ensure our capital program and cost estimates are accurate and deliverable. If we deviate from approved capex program in a manner that is prudent and efficient, the difference in cost due to variations will be rolled into the RAB in the following Regulatory period. However, in the short-run GWW bears the risk of cost overruns.
- **Demand forecasts:** are calibrated with recent actual demands and are conservatively high. In the case of demand lower than forecast, GWW would bear the revenue shortfall and if demands are higher than forecast, customers would bear the risk from over recovery.
- **Tariffs and pricing:** mitigation activities including tariff basket mechanisms ensure GWW can manage price shocks in response to short term fluctuations.
- **Operational risks:** the financial consequences of not maintaining services that we are obliged to are borne by GWW through a range of mechanisms including our GSL scheme.

Risk

- **Climate influences and climate adaptation:** GWW bears the financial consequences of inaccurate forecasts and commitment to reach net zero, however customers bear the risk of extreme weather events and desalinated water orders.
- **Financial and regulatory risks:** in the short term, GWW bears the risk of any changes in the operating environment that increase costs. Due to the pass-through mechanisms, customers bear the risk of increased cost for desalinated water orders during dry periods.
- **Business:** GWW bears all risk associated with inability to meet customers' expectations, reputationally and financially through the GSL scheme.

Supporting documents for Risk:

- GWW Risk Management Framework
- GWW Risk Appetite Statement
- Corporate strategic and operational risk registers

Appendix A: PREMO self-assessment against all elements

A.1 Performance assessment against PREMO requirements

This is our response to the ESC's guidance questions for the 'performance' element of PREMO.

Our self-assessment rating for performance is 'Standard'.

Guiding question	Response
To what extent has Greater Western Water demonstrated delivery of its customer	We have demonstrated we have delivered on WW's customer outcomes (as a standard rating business), and mostly met CWW's customer outcomes (as an advance rating)
outcomes commitment over the current regulatory period? Did its customers get what they paid for?	Where there were shortfalls, they were explained to customers as part of the annual reporting process, with the ESC noting the thorough commentary for each measure.
	Broadly, shortfalls were driven by pandemic restrictions, three years of La Nina conditions and our integration. Pandemic restrictions limited our ability to deliver face-to-face activities or meter reads. The unusual three years of La Nina conditions (above average rainfall) led to some shortfalls such as lower alternative water consumption and increased the likelihood of spills. Integration led to a pause on some online payment and billing services promotion as we rescoped our billings replacement system.
How does Greater Western Water's actual operating expenditure across the current period compare with the established benchmark allowance for both City West Water and Western Water, and to what extent has the water business rationalised any discrepancies?	We exceeded our determination operating expenditure benchmarks for CWW and WW by 7.9%. Higher operating expenditure was driven by integration and subsequent business transformation costs (that was not priced into the previous price submission), changes to other obligations such as payroll tax, superannuation and government policies and the pandemic and subsequent effects on unit rates. Despite challenges, controllable operating costs per connection have remained at a similar level to 2018 price submission levels. GWW will not recover GSL costs from customers.
How does actual capital expenditure across the current period compare with the established benchmark allowance for both City West Water and Western Water, and to what extent has	We exceeded our determination capital expenditure benchmarks for CWW and WW by 24.9%. Higher capital expenditure was driven by:

Guiding question	Response
Greater Western Water rationalised any discrepancies?	 high growth and financial constraints resulting in competing prioritisation of spending and subsequent (under) investment in other areas to meet short-term compliance obligations. substantial increases to unit rates across all capital works driven by supply chain challenges and ageing infrastructure. ageing infrastructure (parts of our network are over 100 years old in the inner CBD region) requiring significant increased renewals to maintain reliability to these highly urbanised and high risk areas. high developer reimbursements driven by location and scale of developments. New systems needed to support integration, for example additional expenditure required for the billing and collections system to accommodate date from two businesses rather than one. Despite challenges, capital costs per connections have declined since 2018 price submission levels.
To what extent does customer sentiment demonstrate satisfaction in Greater Western Water's performance over the current regulatory period?	Customer sentiment across ESC's customer perception survey has improved across all four measures and were on par with state averages.
Are customers happy with the value they receive from Greater Western Water?	High growth, pandemic impacts and integration activities drove higher spending than anticipated but customers considered us value for money over the period. This is in line with state-wide averages, with our scores improving over the 2018-23 period.

A.2 Risk assessment against PREMO requirements

This is our response to the ESC's guidance questions for the 'risk' element of PREMO.

Our self-assessment rating for risk is 'Standard'.

Guiding question	Response
To what extent has Greater Western Water demonstrated a robust process for identifying risk, and how it has decided who should bear these risks? i.e., such that customers are not paying more than they need to.	Our enterprise risk management framework is embedded across our business, and risk management policies and procedures are consistent with the principles of ISO 31000.
	Clear governance structures are in place at operational, strategic, executive and board levels. We took additional steps to ensure that the executive and board were active in risk conversations through deep dives into capital and operating expenditure where risk was a key topic. A strategic regulatory risk assessment aligned to our operational and strategic risk registers allowed us to assess and allocate risk between the business and our customers, aligning to the Risk element of PREMO.
To what extent does the proposed guaranteed service level (GSL) scheme provide incentives for Greater Western Water to be accountable for the quality of services delivered, and provide incentives to deliver valued services efficiently?	Our new proposed GSL scheme places the financial risk onto GWW and extends the benefits to customers in the previous western region, including a new water quality GSL. GWW will not recover GSL costs from customers.

A.3 Engagement assessment against PREMO requirements

This is our response to the ESC's guidance questions for the 'engagement' element of PREMO.

Our self-assessment rating for engagement is 'Advanced'.

Guiding questions	Responses
To what extent has Greater Western Water justified how the form of engagement suits the	Spoke to our customers and stakeholders (including Traditional Owners) about the way/s they wished to be engaged and communicated with, rather than assuming general engagement practices.
content of consultation, the circumstances facing the water business and its customers?	Took different forms of engagement to suit the needs of our customers (face to face, surveys, online focus groups, interviews).
	Provided translation services and translated surveys/deliberative forum to include our diverse communities.
	Used multiple techniques to triangulate community views on a range of topics.
	Included the difficult topic of harmonising service levels across our metro and regional customers.
	Much greater emphasis on affordability given the high inflation/interest rate environment.
	Worked directly with our engagement advisors to ensure our engagement was done in a culturally and emotionally safe way – with strategies in place to achieve this in every meeting.
	Deliberative and facilitated approaches taken to engagement activities to ensure collaborative engagement.
To what extent has Greater Western Water demonstrated that it provided appropriate instruction and information to customers about	For each stage of our engagement work, we provided up to date, easy to access and easy to understand information. This supported our survey process so customers were informed and able to engage meaningfully with the work.
the purpose, form and content of the customer engagement?	Our panel was provided with background documents, a private online portal and access to key subject matter experts to provide information and training to respond effectively to the work.
	IAP2 level of 'Collaborate'.
	Significant time devoted to the development of critical thinking skills.
	Adjustments made to minimise and manage framing, social desirability and loss aversion biases.

Guiding questions	Responses
To what extent has Greater Western Water demonstrated that the matters it has engaged	Narrative techniques were used in the activation phase where customers told stories. These anecdotes were analysed by our consultants to reveal what was important to customers without any framing by GWW.
on are those that have the most influence on the services provided to customers and prices charged?	The interests, concerns and priorities gathered in the activation phase were further developed in the exploration phase.
	Customer values evident in the exploration phase were quantified in the valuation phase.
	The topic areas presented for deliberation were assessed for customer interest and price materiality.
To what extent has Greater Western Water explained how it decided when to carry out its engagement?	The activation phase saw the development of a 'customer agenda' separately from the 'organisation agenda'. The overlap between these largely informed the content of the valuation stage because the topics passed both the materiality and interest tests.
	Timing of engagement was restricted due to integration and availability of resources. The engagement program commenced as soon as possible after integration.
To what extent has Greater Western Water demonstrated how its engagement with customers has influenced its submission?	We have clearly outlined how the findings of each engagement stage and activity have influenced the engagement strategy and/or the price submission itself.
	The deliberative process gave customers' the opportunity to define how we, as a business, work.
	Our customer forum and confirmation surveys and events gave customers the opportunity to provide feedback on our suggested plans and outcomes.
	Our customer engagement has influenced our proposed capital program. Any additional operational expenditure to support outcome delivery will be re-prioritised from other programs, or found through efficiencies.
To what extent has Greater Western Water demonstrated that its engagement was	To ensure that all members of our community, including those who may experience vulnerability, were able to take part in our work.
inclusive of consumers experiencing vulnerability?	Surveys were provided in languages other than English, with our community survey provided with our translator service hotline and our willingness to pay for surveys translated into Mandarin, Arabic and Vietnamese (most commonly spoken languages in our service region other than English). Interpreting services were provided for panel members who did not speak English.
	All engagement material was reviewed for plain English.

Guiding questions	Responses
	We paid all participants to ensure there was no burden on them participating in our engagement. Deliberative panel members who were carers were offered additional assistance to ensure they could attend panel sessions.
	Needs of customers having trouble making ends meet were highlighted in engagement reports.
	Consumer Action Law Centre was involved in our Community Advisory Group and gave advice and insights into the experience of customers.
	Language was carefully chosen to create empathy with these customers and avoid the risk of 'othering'.
To what extent has Greater Western Water demonstrated that its engagement was	We are committed to working with Traditional Owners and First Nations people beyond the work of this price submission.
inclusive of First Nations people?	GWW reserved places on the deliberative panel for First Nations people, to ensure representation of their voices on the panel.
	GWW has established ongoing quarterly forums with Traditional Owners to discuss their priorities and support ongoing partnerships.
	We have outlined how we engaged with our Traditional Owner partners in our 'Parallel stakeholder and partnership engagement' section and reconfirmed our commitments to Traditional Owners through the 'what we heard' briefing note with dedicated funding for Traditional Owners to lead projects and support GWW to form ongoing partnerships.

A.4 Management assessment against PREMO requirements

This is our response to the ESC's guidance questions for the 'management' element of PREMO.

Our self-assessment rating for management is 'Standard'.

Guiding question	Response	
To what extent has Greater Western Water demonstrated how its proposed prices reflect only prudent and efficient expenditure?	Operational expenditure has increased over the previous regulatory period determinations outlined in the performance and operational expenditure sections with clear justification and rationale for changes. GWW has provided detailed plans on how it will achieve a 3% annual operating efficiency target to ensure expenditure is prudent and efficient and will continue to deliver efficiencies over current and future price periods and GWW has proposed declining bill paths over the next regulatory period.	
	We undertook an extensive capital program prioritisation process aligned with principles to ensure our capital expenditure is prudent and efficiency and can reduce bills for customers.	
	We undertook additional assurance of capital program top 10 major project business cases and top 10 program justifications to ensure cost estimates are accurate, justified and demonstrate prudent and efficient expenditure.	
	Our expenditure programs are aligned to our agreed customer outcomes and what customers told us is important.	
	The expenditure forecasts for the 2024–28 period have been developed using sound assumptions and methodologies to produce efficient expenditure forecasts across operating and capital expenditure projects and programs.	
To what extent has Greater Western Water justified its commitment to cost efficiency or productivity improvements?	GWW has committed to an ambitious annual operating efficiency target of 3% per annum, and is implementing a sustainable efficiency program to ensure the target is met. Our efficiency forecast has been justified based on four components:	
	 Identified integration efficiencies Identified transformation efficiencies Unidentified transformation efficiency target Residual efficiencies (economies of scale and scope): 1.4% efficiency per year. Detail on the proposed efficiencies is in Section 4. 	
	GWW is delivering an asset delivery transformational program which will enhance our asset delivery maturity and address pain points across the asset delivery lifecycle. The Asset Delivery Organisational Review program will enable GWW to successfully deliver current programs, while establishing the foundations to scale for future	

Response		
growth, move away from reactive issues management to proactive risk management and provide a clear view of the portfolio to delivery business productivity improvements through single processes and systems.		
GWW implemented a through Attestation assurance process which provided confidence for the board that: information and documentation provided in the price submission and relied upon to support GWW's price submission is reasonably based, complete and accurate in all material respects.		
financial and demand forecasts are the business's best estimates, and supporting information is available to justify the assumptions and methodologies used		
the price submission satisfies the requirements of the Review Guidance paper issued by the Essential Services Commission in all material respects.		
The price submission has a clear governance and management structure including:		
Executive and board engagement throughout the development with monthly reporting and discussions		
appropriately skilled program management team and work stream leads for each of the key price submission elements.		
External specialist support including:		
 detailed review of all regulatory and demand models, outputs, and assumptions. strategic economic advice on key inputs and challenges and review of all operational expenditure forecasts. detailed review of capital program, businesses cases and program justifications (including cost estimates) and capital forecasts. 		
 GWW executive and board have demonstrated ownership and commitment to the development and delivering the 2024 price submission over the last 18 months, which has included: Executive and board standing monthly agenda item for price submission updates. dedicating board strategic speaker sessions to speakers with relevance to the price - submission, including the Essential Services Commission, Environment Protection Authority, Deputy Secretary of Water and Catchments. of Department of Environment, Energy and Climate Action, Energy and Water 		

• dedicating the 2022 board strategy day to price submission discussions and executive strategy days

Guiding question	Response		
	 including longer agenda items where deeper discussions were needed such as operational and capital expenditure. 		
	Further, GWW executive and board have committed to refreshing our 2030 Strategy to align with our agreed customer outcomes to ensure we focus and deliver on what our customers have told us is most important.		
To what extent has Greater Western Water demonstrated its price submission is an 'open book'?	This submission and supporting documents provide an 'open book' for the ESC and their advisors to understand in detail the basis of our expenditure and pricing forecasts.		

A.5 Outcomes assessment against PREMO requirements

This is our response to the ESC's guidance questions for the 'outcomes' element of PREMO.

Our self-assessment rating for outcomes is 'Standard'.

Guidance question	Response	
Has Greater Western Water provided evidence that the outcomes proposed have taken into account the views, concerns and priorities of customers?	Through a broad and extensive six-stage engagement program leveraging GWW 2030 Corporate Strategy strategic outcomes, we listened, learned, and tested customer values and sentiments to understand what matters most to our customers and what they expect from their water provider. Our new customer outcomes were refined at each stage of engagement program, with our customer forum validating that they represent their values and interests.	
Has Greater Western Water provided sufficient explanation of how the outcomes it has proposed align to the forecast expenditure	Our capital program is mapped to each of the proposed 5 customer outcomes to ensure we are delivering what matters most to our customers. Our capital program top 10 projects and program justifications show clear alignment with our customer outcomes and benefits.	
requested?	We have committed to refreshing our 2030 Strategy to align with our customer outcomes which will mean annual prioritisation and business planning for operational expenditure will provide benefits to customers through delivering on our customer outcomes.	
Has Greater Western Water proposed outputs to support each of its outcomes, which are measurable, robust and deliverable?	Our customer forum was provided various measures aligned to each of the customer outcomes with the customer forum picking which measures represented their values the most. The customer forum then endorsed the outcomes and measures. We sought additional support from the Customer Advisory Group who endorsed the measures and outputs and suggested adding additional measures to better reflect our diverse customer base which GWW addressed.	
	All measures and targets have been developed with subject matter experts across GWW to ensure they are measurable, robust, and deliverable.	
Has Greater Western Water provided evidence that the outputs it has proposed are reasonable measures of performance against stated outcomes?	We were operating under our previous price determinations, which included 11 customer outcomes underpinned by 71 different measures. To develop this submission, we aligned and mapped previous targets to develop one set for GWW.	

Guidance question	Response	
	Each output measure, new or existing, has been reviewed using historical performance data for WW and CWW to combine measures for GWW. Our measures are aligned with our capital and operating expenditures to deliver similar price for similar service.	
Has Greater Western Water demonstrated a process to measure performance against each outcome and to inform customers?	We have established an ongoing customer forum who will meet annually to track our performance against the 'score card' and provide the result publicly through our website. This process ensures GWW is held accountable by customers.	

Appendix B: Regulatory risks

Risk	Implication	Mitigation activities	How risk mitigations contributes to balancing the risk	Risk allocation summary
Operating expen	diture			
Not meeting our efficiency target	Financial risk for the business if we are not able to deliver the efficiencies that we've proposed.	Sustainable efficiency program underway, with full support of the executive and the board.	High target efficiency proposed will deliver on more efficient opex, reducing the cost to customers.	GWW bears the financial risk.
Capital program				
Deliverability of the capital program	 GWW delivers a diverse range and scale of capital projects. There is a risk that projects will not be delivered on time. Missed project delivery targets can result in: failure to meet KPIs. failure to deliver customer outcomes. project benefits not being captured. 	 'Uncertain projects' have been identified and excluded from the PS2024 capital program. Deliverability of individual projects and programs assessed in project and program justification documents and based on what legacy businesses have historically been able to deliver. We also considered our ability to deliver within the current operational environment. Continue existing risk controls including project governance, reporting, training, procurement, and auditing practices. The Asset Delivery Organisational Review (ADOR) has identified a considerable work program that will build our capacity to deliver the infrastructure required over the next decade. 	Sufficient measures and current processes are put in place, including consideration of current construction limitations and improving internal processes and capacity to ensure the deliverability of the capital program means we can deliver what our customers are paying for.	Uncertain projects' have been identified and excluded from the PS24. Deliverability was at the forefront in preparing our capital plan for the regulatory period. We examined what we have been previously able to deliver and the capital plan proposed is consistent with historical spend. If we deviate from PS24- approved capex in a manner that is prudent and efficient, the difference

Appendix B

Risk	Implication	Mitigation activities	How risk mitigations contributes to balancing the risk	Risk allocation summary
	GWW either under or over recovering revenues relative to efficient costs.			in cost due to variations will be rolled into the RAB in the following Regulatory period. However, in the short-run GWW will bear the risk of cost overruns.
Cost estimation risk	GWW delivers a diverse range of capital projects. Not all projects will be delivered to the P50 budget (some will be under; some will be over). This may cause GWW to either under- or over-recover revenues relative to its efficient costs	 GWW has built bottom-up cost estimates for projects and programs which consider current delivery context and economic climate. We have used quotations where possible and probabilistic cost estimates at the P50 level based on recent projects/unit rates. 'Uncertain projects' have been identified and excluded from the PS24 capital program. GWW's capital program will be monitored and adaptively managed through PS24. This includes, enterprise-wide prioritisation process, management of impacts to strategic risks at a project level and management of budgets at a program level. In many instances, GWW has built its cost estimates using the best available information in Financial Year 2023. Given the large March CPI number GWW has not inflated all of its estimates, instead we will in some instances bear the risk ourselves. We have not inflated where: investments have an established delivery model a project is in delivery 	GWW's PS24 retail prices reflect a revenue requirement based on the expected value of the capital program.	If we deviate from PS24- approved capex in a manner that is prudent and efficient, the difference in cost due to variations will be rolled into the RAB in the following Regulatory period. However, in the short-run GWW will bear the risk of cost overruns. Where GWW has escalated cost estimates we have used CPI, instead of the construction indices which have trended higher in recent years. The risk of ongoing higher inflation in the construction sector is being worn by GWW.

Appendix B

Risk	Implication	Mitigation activities	How risk mitigations contributes to balancing the risk	Risk allocation summary
		 cost updates were provided late in the development of the capital plan (post 30 June 2023) to align with 2023-24 corporate plan, mainly applicable to IT investments. 		
Demand forecast	S			
Unexpected loss of a major customer or customer segment	Reduced demand for GWW services during PS24 leading to a revenue shortfall.	GWW customer service representatives regularly meet with major customers to understand their needs and forward forecasts.	An accurate demand forecast will maintain GWW's financial viability in PS24.	GWW holds the consequences of inaccurate (high) forecasts in PS24.
Inaccurate demand forecasts	When actual demand is greater than forecast demand, GWW may recover excessive revenues, meaning customers are paying more for GWW services than its efficient costs. When actual demand is less than forecast demand, GWW may recover insufficient revenues meaning customers are not paying GWW its efficient costs.	 Develop demand forecasts calibrated to recent actual demands. Conservatively high demands GWW has options to: Uncertain and unforeseen events mechanism available if events affecting demand occur Tarif basket form of price control includes provision for adjustments for actual demand quantity 	Risk mitigation uses higher demand to place more risk with GWW, and less with our customers.	GWW holds the consequences of inaccurate (high) forecasts in PS24 as GWW would recover less than anticipated. Without mitigations, customers hold the consequences of inaccurate (low) forecasts in PS24 as GWW would recover more than anticipated.
Risk	Implication	Mitigation activities	How risk mitigations contributes to balancing the risk	Risk allocation summary
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Inaccurate timing and location of growth forecast	The overall growth rate can change GWW's revenues, meaning that customers may pay more or less than GWW's efficient costs. The location of growth (balance of infill to growth areas) can change GWW's infrastructure requirements.	Liaise closely with planning and approvals agencies (VPA, councils) to determine the best growth estimate by location. Continue to develop staged growth plans so that capital projects can be timed to match growth patterns. Only include 'certain' capital projects in PS2024. Consultation with development industry on expected infrastructure requirements. Network Servicing Plans transparently published and inform any reimbursable costs GWW can charge to minimise costs to GWW.	Staged growth plans allow GWW to invest only in prudent expenditure. The exclusion of uncertain projects means customers are not paying for speculative capex.	GWW holds the consequences of inaccurate (low) forecasts in PS24 as higher growth will require a bring forth of planned expenditure not recovered in pricing. Without mitigation, customers would holds the risk of inaccurate (high) forecasts, but GWW's use of removing all 'uncertain' projects and staged investment plans mitigates this customer risk.
Tariffs and pricing	9			
Removal of the residential sewage disposal charge (SDC)	Risk of revenue recovery transfer to customers who do not benefit from a sewage service.	Introduction of new water usage charge applied to customers who receive both a water and sewage service. Transfer of revenue recovery of outgoing SDC to this charge. Customers not receiving a sewage service continue to receive a lower water usage charge.	Transfer of SDC revenue recovery to only customers receiving a sewage service ensures efficient costs recovered from customers who benefit from the service.	Removal of SDC will not impact user pays approach to sewerage service.
Adverse impacts for customer	Risk of certain customer groups	Transitional approach applied to tariff alignment over a period of two regulatory periods to manage annual bill impacts.	The shift of increased variable revenue recovery in the Western	Transitioning water variable charges over two regulatory period manages

Risk	Implication	Mitigation activities	How risk mitigations contributes to balancing the risk	Risk allocation summary	
cohorts from tariff strategy	receiving price shocks as we align tariffs	Focus on the impact to Western tenant bills as we transition the fixed to variable ratio to a higher variable component compounded by the gradual removal of the tenant rebate.	region sends better price signals to customers on water usage.	bills in a smooth manner. Combined with the tariff basket mechanisms, GWW can adjust in response to	
	Tenant bills in the western region are some of the lowest in the state and payment assistance will continue to be provided			short term fluctuations to limit price and bill shocks in the short run.	
Operational risks					
Infrastructure failure causing breach of	Inability to provide drinking water to standards, placing at	Maintain operational arrangements for water quality monitoring and alerts under Bulk Water Supply Agreement with Melbourne Water.	Public trust in safe, high-quality water supply is of fundamental importance and everyone having the	GWW holds the financial consequences of failure to deliver water to	
Department of Health standards	risk: • public health	HACCP system audits;	same great tasting water was a high priority of our customer	standard during PS24.	
	 customer satisfaction with 	Compliance and regulatory audits completed in accordance with the Safe drinking water Act	engagement.	Water quality GSL which	
	water quality	Upgrades and consolidation of SCADA systems and geospatial technology.	High quality reliable water service for the community provides a more	GWW will bear the cost.	
		Maintain water testing and disinfection program.	efficient water supply than relying	Risks to community health	
		Continuous reporting on drinking water quality.	on bottled water purchases or individual water purification	and our reputation are managed within our	
		Major PS24 capital expenditure in system augmentations to enable more resilient and consistent supply at the highest-risk locations and treatment plant capacity.	systems.	enterprise risk framework.	
		Drinking water quality roadmap			
Infrastructure failure causing breach of	Inability to contain sewage in network under 1:5 average	Maintain monitoring and testing programs. Maintain calibrated hydraulic models.	Safe disposal of sewage is important to maintain sanitation, local amenity	GWW holds the consequences of a breach	

Risk	Implication	Mitigation activities	How risk mitigations contributes to balancing the risk	Risk allocation summary
Environment	recurrence interval	Up to date infrastructure master plans	and environmental health of	for 1:5 events that are not
Protection Authority (EPA) obligations	(ARI) events Inability to meet	Major PS24 capital expenditure in sewer treatment to manage growth and capacity.	waterways.	contained.
obligations sewage treatment plant discharge requirements	Environmental Resilience Roadmap reported to the board quarterly		Risks to community health, the environment and our reputation are managed within risk framework.	
Infrastructure failure causing	GWW's water, sewerage and	Asset management plans to identify maintenance programs	Responsive costs can be controlled by taking preventative actions.	The risk allocation is shared:
inability to provide network	recycled water networks and	Major PS24 capital expenditure in:asset ecosystems systems which are digital		the consequences of not
services to	facilities deliver a		Customers told us	maintaining services that customers value will be
customers	range of essential services.	systems and capabilities that monitor, record and report on condition of assets with the capability to monitor and control physical	water is safe, consistent and resilient is important.	borne by GWW through our new GSL scheme.
	 can result in: disruption to supply failure to deliver 	 processes and devices in real time water and sewer main renewals to maintain the same level of service 		customers hold the risk of service disruption
		 system augmentations to enable more resilient and consistent supply at the highest-risk locations and treatment plant capacity. 		
	customer outcomes • failure to meet KPIs guaranteed service level			
	(GSL) payments			

Risk	Implication	Mitigation activities	How risk mitigations contributes to balancing the risk	Risk allocation summary
Major IT and/or asset ecosystems failure	 GWW's information technology systems support GWW's distribution and treatment operations. IT system failure can result in: negative impact on service supply technical failure to SCADA, billing system, GIS, system ops, etc. financial loss short-term business continuity problem increase in expenditure to rectify problem(s) 	 Implement a range of controls to address risks associated with IT service provision, including: recovery and backup program appropriate use of cloud computing services effective business continuity framework modernisation of IT systems to contemporary platforms considerable capital expenditure in IT and asset ecosystem uplift and consolidation 	Reliable and secure IT systems are fundamental to providing valued customer experiences, maintaining customer trust and meeting compliance obligations. Response expenditure can be controlled by taking preventative actions.	GWW holds the consequences of not maintaining IT systems.
Technology breaches	Loss of sensitive data and/or control of our technology operating environment resulting in financial, reputational, well- being and regulatory impacts.	Business continuity framework, emergency management framework Information security management system including periodic test programs and disaster recovery plan. Cyber strategy uplift including cyber behaviour campaigns and capability uplift Regular cyber behavioural training programs	Reliable and secure IT systems are fundamental to providing valued customer experiences, maintaining customer trust and meeting compliance obligations.	GWW holds the consequences of not maintaining IT systems.

Risk	Implication	Mitigation activities	How risk mitigations contributes to balancing the risk	Risk allocation summary
	Customer privacy and confidential business data are shared.	Cyber security threat and vulnerability monitoring, response plan and quarterly cyber risk reporting to the board		
		Security of critical infrastructure IT program to improve cyber security management to meet industry standards.		
Climate influence	es and climate adaptat	ion		
Extreme weather events	Major events (e.g. a natural disaster) create a widespread disruption and failure to deliver services to the agreed standard leading to large GSL payments.	Maintenance of contingency plans and industry protocols. Water industry emergency response plan. Application for unforeseen and uncertain events mechanism.	It is prudent and efficient for GWW to plan for reasonably foreseeable events. The consequences of Acts of God are covered under the unforeseen events mechanism.	Risk allocation is shared: GWW has mitigation planning in place and provides GSL payments to customers for significant service disruptions. Uncertain and unforeseen events mechanism application where necessary.
Water shortage – leading to supply restrictions	Customer satisfaction is reduced as access to water is rationed via restrictions. Revenue to GWW is correspondingly lower, placing financial viability at risk.	Commitment to water conservation policies, including Target 150 and permanent water use rules. Undertake actions aligning to our latest GWW drought preparedness plan. Provide joint desalinated water order advice to the Minster recommending a volume of water to be purchased in order aligning to the updated water outlook zones actions.	Maintaining security of supply provides customer confidence and avoids customers having to make prospectively inefficient investments in water conservation (or substitute supplies) as a consequence of water restrictions.	Risk allocation is shared: GWW holds the financial consequences of inaccurate (low) forecasts in PS24 as a result of any possible restrictions on the water supply customers pay for desalinated water orders or reductions in

Risk	Implication	Mitigation activities	How risk mitigations contributes to balancing the risk	Risk allocation summary
		Commitment to the SWS and GWMUSS actions relating to water security and resilience of supply		satisfaction resulting from the application of water use restrictions.
		Utilise the tariff basket (reduce volumetric prices) should water sales reduce during the regulatory period.		
Financial and reg	gulatory risks			
Expenditure to achieve net zero by 2030	Uncertain operational expenditure has been removed.	GWW have developed a roadmap to Net Zero by 2030. We are currently working on the implementation plan - focussed on utilising the Vic Governments VRET2 scheme and capital expenditure. Where emissions can't be reduced by the above initiatives, GWW will purchase offsets through operational expenditure to ensure we meet our obligation.	Ensuring GWW is planning and initiating activities to meet obligations	GWW holds the financial risk.
		Collaboration across the water sector to develop imitative solutions		
Inflation and financial market movements	Movements to financial parameters that are outside of GWW's control may lead to GWW either	GWW has sought to deliver P0 real bill reductions for the majority of typical customers in 2024-25 where inflation may remain higher than the long-term trend to help manage nominal bill changes.	The mitigations allow GWW to focus on its controllable costs and not bear risks associated with financial market movements.	In line with ESC guidance, GWW proposes pass- through mechanisms for non-controllable financial market movements during
	under or over- recovering revenues from customers as compared to efficient	GWW is not best placed to manage or hedge financial market movements and several financial pass-throughs are proposed:		PS24. The costs of GWW
	financing costs	Continue ten-year trailing average cost of debt as proposed by the ESC.		managing these risks through hedging are likely to be more than the

Risk	Implication	Mitigation activities	How risk mitigations contributes to balancing the risk	Risk allocation summary
		Adjust prices in response to the trailing average cost of debt		benefits that might otherwise accrue to customers.
		Indexation of prices to inflation		customers.
Desalination cost changes	Victorian Desalination Project (VDP) security payments are subject to variation (up or down depending on refinancing arrangements outside GWW's control). There is a risk that GWW will either under or over-recover funds required for payment of	Given GWW is not party to the desalination contract and is not able to manage desalination cost variations. As such, GWW will maintain cost pass-through mechanisms for changes in VDP security payments and desalinated water order costs. GWW will use the annual tariff basket adjustments to mitigate the impacts of large changes in desalination costs from year to year	Maintaining the security of supply provides customer confidence and prevents customers having to make prospectively inefficient investments in water conservation (or substitute supplies) because of water restrictions.	With the proposed pass- through arrangements, customers will bear the risk associated with changes in desalination costs.
	obligations associated with the VDP. Further, costs increase when desalinated water orders are placed.			
Capital program delivery	Projects that have been removed from the capital program due to low certainty or development may need to be implemented within the regulatory period, causing a financial	The GWW adaptive planning framework will re- prioritise capital projects annually based on the operational risk framework and business risk appetite statements.	Removal of uncertain projects from the capital program prevents over- recovery of revenue from customers, ensuring only prudent and efficient costs are recovered.	GWW holds the risk.

Risk	Implication	Mitigation activities	How risk mitigations contributes to balancing the risk	Risk allocation summary
	impact on the business			
Changes in standards, regulations, and	Changes in standards, regulations and	GWW has incorporated all known changes in regulation in PS24 (including increased Traditional Owner and GED obligations)	GWW has assumed a continuation of current regulatory obligations and standards.	In the medium term, GWW holds the risk of any changes in standards that cause an increase in cost.
legislation	legislation can have a material effect on costs. This may cause GWW to either under or over recover	GWW proposes to retain 'Changes in standards, regulations and legislation' as an event that the uncertain and unforeseen events mechanism would cover.		In the longer term, there is a risk that prices will need
	revenues relative to its efficient costs.	Dedicated government liaison officer to support engagement and partnerships with departments and regulatory agencies.		to increase if GWW must spend a lot more than we have allowed for to
		Liaison with other water corporations and Vic Water.		maintain compliance with regulation and standards.
Business risk				
Decline in customer satisfaction	GWW exists to provide valued services to	Develop a set of customer-focused outcome areas with key measures of performance based on engagement findings.	It is important for GWW to continually adapt its service offerings to only provide services (supported by corresponding expenditures) that are valued by customers.	GWW holds the reputational risk and `performance' (PREMO)
	customers. There is a risk that the level of services provided does not meet	Maintain continuous customer engagement to gain insights into and respond to changing customer expectations.		risk during PS24.
c e c ii	customers' expectations and this could be exacerbated in the current economic climate.	Customer forum to annual track GWWs performance against our customer outcomes, measures and targets		

Risk	Implication	Mitigation activities	How risk mitigations contributes to balancing the risk	Risk allocation summary
	·	Increased support to residential and small business customers through customer support programs		

Appendix C: Customer scorecard

Our measures and rebates were chosen by our Customer Forum (outlined Section 3). To ensure we are appropriately measuring our performance and representing our core services, we engaged with our Customer Advisory Group, developers, and internal stakeholders to identify and include further measures to represent delivery for all stakeholders. Measures in black were chosen by our customer forum, while measures in red were developed through these other groups.

Promise 1: Your water is safe, consistent and resilient				
Experience	Report card measures	Our 2024-28 target	Rebate (\$)	
Your water tastes great, is high quality and always safe to drink	Compliance with water quality standards and regulations (<i>Safe Drinking Water Regulations</i> and <i>Australian Drinking Water Guidelines</i>)	100%		
	Customer satisfaction on our water quality on those who contacted GWW in past 12 months	>85%		
Water is there when you turn on the tap	Number of customers receiving more than four unplanned water supply interruptions in a year	<270 customers	\$100	
Your sewerage service works without interruptions or blockages	Number of residential sewer supply customer interruptions (excludes interruptions due to faults in customers' pipes)	<3,100 customers	\$250	

Promise 2: When things go wrong, we fix them			
Experience	Report card measures	Our 2024-28 target	
Our water and sewerage maintenance crews are responsive and efficient if disruptions happen	Average time to fix a burst or leak in our main or trunk infrastructure (priority 1)	< 465 minutes	
	Average time to fix all reported sewer blockages/spills	< 117 minutes	
	Percentage of unplanned water supply interruptions restored within five hours	>95%	

Promise 2: When things go wrong, we fix them

We provide excellent C customer services when C you contact us

Overall customer satisfaction of those who contact GWW in past 12 months

>80%

Promise 3: We support our diverse communities and customers				
Experience	Report card measures	Our 2024-28 target		
With our partners, we improve the wellbeing of our communities by providing alternative water to irrigate public green spaces	The number of projects funded through the stormwater harvesting partnership fund	2024-27 target: On track 2027-28 target: Met (10)		
We support the financial resilience of our communities and help you if you're having payment difficulties	Customer satisfaction that our prices for our services represents value for money	>60%		
	Proportion of customer support program participants meeting mutual obligations	>75%		

Promise 4: We enable growth and help businesses thrive		
Experience	Report card measures	Our 2024-28 target
We provide excellent customer services when you contact us	Business customer satisfaction on responses to enquires and complaints	>65%
We support agriculture with the right recycled water products for your needs	Volume of recycled water delivered for agricultural uses	>3,500ML
Developers and applicants find us easy, timely and consistent to do business with to get new customers connected	Pressure and flow information applications processed within five business days	>95%
	Standard new customer contribution applications processed within 45 business days	>95%
	Standard plumbing applications completed on time within five business days	>95%

Promise 5: We heal and care for Country		
Experience	Report card measures	Our 2024-28 target
We limit and reduce our impact on the environment including from our	Proportion of beneficial re-use of biosolids from our treatment plants	>90%
treatment plants	The number of EPA-notifiable sewer spills	<13
We will meet our net zero emission targets by 2030	Tonnes of CO2 equivalent emissions	2024-25 target: <27,586 tonnes
		2025-28 target: <27,586 tonnes*
		*We are currently progressing on a pathway to net zero by 2030. At the time of submission, the target tonnes of CO2 equivalent emissions beyond 2024-25 have not been finalised. We anticipate finalising these targets before 1 July 2024 and will inform the ESC with these targets as soon as possible.
We actively support First Nations and Traditional	Deliver actions outlined in our Reconciliation Action Plan (RAP)	2024-25 target: On track – Refer to traffic light report.
Owners self-determination and provide access to water to achieve cultural values		2025-26 target: Met – delivered on actions in our 2023-2025 RAP and begun development or refresh of next RAP.
		2026-28 target: On track - Continued implementation or refresh of next RAP.
	Development and implementation of our Walking Alongside First Nations Commitment.	2024-28 target:
		On track (refer to our commitments in our Walking Alongside First Nations Commitment)

Appendix D: Customer Advisory Group Engagement Support Letter

September 2023

David Middleton and Maree Land Chair and Managing Director Greater Western Water 36 Macedon Street Sunbury, Victoria 3429

Dear David and Maree

We are writing to you as part of our role as Community Advisory Group, regarding Greater Western Water's 2024 price submission.

Greater Western Water (GWW) established their Community Advisory Group in March 2023 as an independent assurance mechanism for the engagement program.

We were brought together to act as a 'critical friend', to provide GWW with feedback and challenge the engagement process. We were supplied with high-level documentation and information on the program. We acted as an independent lens for the GWW price submission team, asking questions of their findings and next steps to ensure their work was robust.

The advisory group met four times between March and August 2023. We were provided with relevant documentation (including engagement results, reports and planning documents) and the opportunity to ask questions of GWW's price submission team, the General Manager of Strategy and Partnerships, General Manager of Customer Experience, the Managing Director, and the Executive Director of Insync.

We are confident in the findings of the engagement program, noting that greater value could have been achieved if the Community Advisory Group had been activated at the commencement of engagement rather than part way through and the overall community engagement program could have benefitted from a longer timeframe. The GWW team has acknowledged this will be an improvement for future pricing submission engagement.

We are particularly pleased with how transparent the team was with us, providing us with both draft and final versions of documents and willingness to acknowledge the challenges they have faced in delivering this program of work.

The methodology, inclusivity and rigorous nature of the engagement program has met our expectations. We are satisfied with the different opportunities GWW provided for members of the community to engage with the price submission.

We are pleased to offer this letter of support for the engagement program to the Greater Western Water Board, and are comfortable with the Board sharing this letter as part of the price submission to the Essential Services Commission.

Kind regards

Bruce Mountain Roslyn Wai (Sep 19 GMT+10)

Luke Lovell Senior Policy Officer

Bruce Mountain Director Consumer Action Law Centre Carbon and Energy Markets Melton City Council

Roslyn Wai Chief Executive Officer

Appendix E: Connection between existing and proposed customer outcomes

We did not re-test our existing customer outcomes directly with our customers. Instead, we leveraged our newly developed 2030 Strategy and its strategic outcomes – Customer, Community and Country. However, our customers values and preferences remained consistent with the values identified in our 2018 price submission and 2020 price submission for City West Water and Western Water respectively. **Table 62** shows the connection and alignment of the existing central and western customer outcomes to our proposed GWW customer outcomes.

Table 62	Our existing	and	proposed	customer	outcomes
	our chisting	unu	proposed	customer	outcomes

GWW Customer outcomes 2024-28		Existing customer outcomes 2018-2023	
Outcomes	Customer experiences	City West Water	Western Water
Outcome 1 : Your water is safe, consistent and resilient	Your water tastes great, is high quality and always safe to drink. Water is there when you turn on the tap. Your sewerage service works without interruptions or blockages.	Outcome 1 : Services to my home and business are safe, reliable, and efficiently managed	Outcome 2: Reliable, safe services
Outcome 2: When things go wrong, we fix them	Our water and sewerage maintenance crews are responsive and efficient if disruptions happen. We provide excellent customer services when you contact us	Outcome 2: Customer service is accessible, and my enquiries are resolved promptly Outcome 3: Billing and payment options are efficient and convenient	Outcome 3 : Innovative approaches to addressing customer needs
Outcome 3: We support our diverse	With our partners, we improve the wellbeing of our communities by providing	Outcome 4: Customers in hardship are supported	Outcome 1 : Fair and affordable charges

GWW Customer outcomes 2024-28		Existing customer outcomes 2018-2023	
communities and customers	alternative water to irrigate public green spaces.	Outcome 5: The whole of the water cycle is managed in an environmentally sustainable way	Outcome 5: Sustainably contributing to the community and regional liveability
	If our customers are having payment difficulties, we provide support.		
Outcome 5 : We heal and care for Country	We limit and reduce our impact on the environment including from our treatment plants.		Outcome 4: Caring of the environment
	We will meet our net zero emission targets by 2030.		
	We actively support First Nations and Traditional Owners self-determination and provide access to water to achieve cultural values.		
Outcome 4 : We enable growth and help businesses thrive	We provide excellent customer services when you contact us.	Outcome 6 : City West N/A Water is a valued partner in servicing a growing Melbourne	N/A
	We support agriculture with the right recycled water products for your needs.		
	Developers and applicants find us easy, timely and consistent to do business with to get new customers connected.		

Appendix F: Top 10 major project summary

Full business cases have been developed for all the top 10 major projects and will be available to the ESC upon request during their review process. Project summaries will be included as appendices to the price submission and are provided below.

Project 1	Improving Waterway Health in Woodend Woodend Recycled Water Plant
Service	Sewer
Asset category	Treatment
Cost driver	Growth
Description	Major plant upgrade of Woodend Recycled Water Plant (RWP) to meet future capacity requirements. The upgrade includes the conversion of the existing Intermittently Decanted Aerated Lagoons (IDAL) to a Membrane Bioreactor (MBR) based treatment system meeting future growth requirements.
Customer outcome	The project supports our customer outcome of healing and caring for Country by improving water quality.
Background	The Woodend RWP is currently treating approximately 1.1 ML/day at average dry weather flow (ADWF), which is above its designed treatment capacity of 0.85 ML/day ADWF. This disparity will continue as growth continues within the Woodend catchment. Additionally, Woodend RWP's current discharge licence conditions do not align with general environmental duty (GED) principles and it is likely in the future that more stringent discharge conditions will be enforced, requiring an increase in recycled water quality.
Risk addressed	 Environmental risk: impact on waterway health due to poor quality discharge Regulatory risk: meeting GED compliance obligations Service delivery risk: unable to deliver appropriate sewerage services due to growth in demand
Start year	2023-24
Completion year	2029-30
Total Capex over Regulatory Period (Real \$2023-24)	\$58.39 million
Total Project Cost (Real \$2023-24)	\$61.10 million

Project 2	Improving water supply reliability in the Macedon Ranges Macedon Ranges Transfer Augmentation
Service	Water
Asset category	Pipelines/Networks
Cost driver	Growth
Description	 To provide the Macedon Ranges with secure, reliable and consistent potable water. The project includes: new inlet works into the Rosslynne Reservoir new pipelines between Rosslynne Reservoir, Magnet Hill Tanks and Riddells Creek new tanks and pump infrastructure in Gisborne to enable the changes and future proof for growth in the region minor works to prevent disruption to customers in the vicinity of the works
Customer outcome	The project supports our customer outcome of your water is safe, consistent and resilient by improving water security in the Macedon Ranges.
Background	Macedon Ranges (including Woodend, Macedon, Mount Macedon, New Gisborne, Gisborne and Riddells Creek townships) is serviced by the Rosslynne Water Supply System. The 25GL Rosslynne Reservoir is the major regional storage for the Rosslynne Water Supply System. This project will enable year round filling of Rosslynne Reservoir from Melbourne, eliminate aesthetic water quality complaints and enable future works to increase the volume of flows that can be transferred into Rosslynne Reservoir.
	The current operating regime fills Rosslynne Reservoir with water from Melbourne, via Sunbury, for approximately 9 months of the year. When Rosslynne is being filled with water from Melbourne, the Macedon Ranges also receive water from Melbourne. When Rosslynne is not being filled, the towns in the Macedon Ranges receive water from the reservoir via the Rosslynne Water Filtration Plant (WFP). Customers observe the aesthetic water changes from changing water sources and complaints are received.
	The filling of Rosslynne Reservoir cannot be maintained through summer due to capacity limitations through the Sunbury water network and due to a single transfer main that serves as both inlet and outlet from the Rosslynne WFP.
Risk addressed	 Service delivery risk of: water restrictions inconsistent water supply (quality and capacity) low pressure events
Start year	2023-24
Completion year	2026-27
Total Capex over Regulatory Period (Real \$2023-24)	\$55.87 million
Total Project Cost (Real \$2023-24)	\$58.56 million

Project 3	Supporting CBD growth with better sewer capacity CBD Stage 4 – Siddeley Street
Service	Sewer
Asset category	Pipelines/Networks
Cost driver	Growth
Description	Provide for future population growth in Melbourne's CBD and facilitate the rehabilitation of the existing Melbourne Main Sewer.
	The works include a new sewer in Siddeley Street to provide an outlet into Melbourne Water's network and also connect to the previously constructed stages of the CBD Sewer Strategy.
Customer outcome	The project supports our customer outcome of your water is safe, consistent and resilient by preventing possible damage and disruption by upgrading ageing assets in the CBD and improving water security for future growth.
Background	The Melbourne CBD brick sewer network has been in service for more than 120 years and is reaching capacity due to strong population growth in the Melbourne CBD over the past three decades. Strong residential, retail and employment growth are forecast to continue to 2051 and beyond.
	The Melbourne CBD Sewer Strategy was developed in 2015, to cater for growth and replace the 120-year-old Melbourne brick sewer over four key stages. Stages 1 (Spencer Street Sewer) and 2A (Lonsdale Street Sewer) were completed in December 2018 and November 2020 respectively.
	Stage 3A (Elizabeth Street) is in construction, due to be completed in late 2023. Stage 3B will be a future stage and is an extension of Stage 3A, and the Siddeley Street Sewer is the fourth stage. Completion of this Strategy will increase the capacity of the Melbourne CBD Sewer Network by constructing a second sewer outlet. This project (Stage 4) is critical as it increases the capacity of the outlet for the sewer flows in the CBD.
Risk addressed	 Regulatory risk: compliance of sewer network in the CBD Service delivery and financial risk: inability to service growth and provide adequate sewerage services the existing brick Melbourne Main Sewer is in poor structural condition. There is a risk of rapid deterioration of the existing defects and this presents an ongoing catastrophic risk.
Start year	2025-26
Completion year	2027-28
Total Capex over Regulatory Period (Real \$2023-24)	\$46.45 million
Total Project Cost (Real \$2023-24)	\$48.05 million

Project 4	Modernisation of customer experience and data capability Platypus
Service	N/A
Asset category	Corporate
Cost driver	Renewals
Description	Replacement of existing, antiquated, and duplicated billing and collections systems with a single, consolidated, and modern fit-for-purpose solution.
Customer outcome	The project supports our customer outcome of when things go wrong, we fix them by improving communication with our customers relating to system disruptions and billing information and allowing our customers to choose how they prefer to communicate with us (self-service online portal).
Background	Existing billing and collections systems from the two legacy businesses were outdated and becoming less able to meet modern requirements for privacy and data security as well as customer expectations of service and communication.
	The fundamental problems that this investment seeks to address stem from legacy capabilities inherent in the solutions and the consequent issues arising from the integration. The problem areas are as follows:
	 Increasing number of cybersecurity threats, requiring modern system architecture that is capable of providing better security into the future. There is an absence of a comprehensive view of customer interactions. This is exacerbated by end-of-life technology platforms with limited features that support extending the solutions' capabilities. GWW inherited two billing and collection solutions in addition to a fragmented integration of internal and external systems and multiple sources of truth. Independent assessments have identified that the billing and collections processes (supporting two billings & collections solutions) and some systems-based controls are not fully adequate or effective. Also, essential components of Gentrack operate on out of support infrastructure (operating system software and servers), increasing security threats.
	Removal of the duplication of capabilities that support the delivery of billing and collection services, will remove process complexities for customers and employees, reduce risk of cybersecurity incidents created by having duplicate systems and improve data collection and analysis, supporting a range of improved processes and analysis across the business.
Risk addressed	 Customer risk: Limited customer interaction capabilities Regulatory/compliance risk: Fragmented and multiple billing solutions Inadequate and ineffective systems-based controls Risk of cybersecurity and privacy breaches
Start year	2019-20
Completion year	2023-24
Total Capex over Regulatory Period (Real \$2023-24)	\$37.47 million

Project 4	Modernisation of customer experience and data capability Platypus
Total Project Cost (Real \$2023-24)	\$97.58 million

Project 5 Water security for Sunbury and the western region Holden Tank Water Pumping Station & Transfer Main Service Water **Pipelines/Networks** Asset category Cost driver Growth Description The Holden Tank Water Pumping Station (WPS) and pipeline to supply water from the Holden Tank site to the Bald Hill Tank in Sunbury. The project will increase transfer capacity into the Sunbury Water Network to cater for the ongoing growth in the region as well as improving system resilience. Customer outcome The project supports our customer outcome of your water is safe, consistent and resilient by improving water security in the Sunbury region. Background Sunbury is experiencing rapid growth and is forecast to increase from 17,000 lots to 64,000 lots in the next 50 years. The Sunbury Water Network Master Plan (2020) identified the need to provide additional supply into Sunbury to cater for growth. Sunbury is currently supplied from a single source, through the Shepherds Lane WPS. This pump station is not conforming to GWW standards, as it is pumping more than the maximum 18 hours daily. The project will increase water supply capacity into Sunbury and also increase system resilience. Risk addressed Operational resilience risk: reliable and secure drinking water supply for Sunbury, Diggers Rest and Bulla. 2023-24 Start year 2027-28 Completion year **Total Capex over Regulatory Period** \$36.31 million (Real \$2023-24) **Total Project Cost** \$36.78 million (Real \$2023-24)

Project 5	Water security for Sunbury and the western region Holden Tank Water Pumping Station & Transfer Main
Project 6	Providing sewer services to our growth regions Emu Creek Branch Sewerage Main
Service	Sewer
Asset category	Pipelines/Networks
Cost driver	Growth
Description	Provide a new branch sewer to service future population growth in the Sunbury region associated with the Lancefield Road and Sunbury South Precinct Structure Plans.
Customer outcome	The project supports our customer outcome of your water is safe, consistent and resilient by improving water security in the Sunbury region.
Background	This project is to service the growth that is forecast in the Lancefield Road and Sunbury South precincts and the future Sunbury North precinct – all part of the Sunbury Growth Area identified by the Victorian Planning Authority. GWW refers to the combined region as the Emu Creek Development precinct. With the infrastructure currently in place, Emu Creek population growth will exceed sewer network capacity from 2026, leading to sewage overflows that will create an environmental hazard. This project will provide a sewerage outlet for the Sunbury growth areas within the Emu Creek catchment and ensure GWW contains our sewage in accordance with our compliance obligations to protect the health, safety and environment to our customers and community.
	complete sewer construction in the future.
Risks addressed	 Public health risk and environmental risk: protect public health and the environment our customers live in through responsible sewage transfer and treatment Service delivery risk: our sewer network has the capacity to meet peak flows
Start year	2021-22 (early works) 2025-26 (balance of works)
Completion year	2030-31
Total Capex over Regulatory Period (Real \$2023-24)	\$34.25 million
Total Project Cost (Real \$2023-24)	\$81.14 million

Project 7	Supporting waterway health in Gisborne Gisborne Recycled Water Plant Upgrade
Service	Sewer
Asset category	Treatment
Cost driver	Growth
Description	The Gisborne Recycled Water Plant Upgrade Project is the design and construction of a new 3.65 megalitre per day recycled water plant, based on Membrane Bioreactor (MBR) technology, including a two-year operation and maintenance period. This treatment plant is to replace the existing plant which was designed for sewerage inflows up to 1.5ML/d of Average Dry Weather Flow in the 1980s and has reached the end of its life and is unable to cater for the growth in the region.
Customer outcome	The project supports our customer outcome of healing and caring for Country by improving water quality.
Background	The business case comparison document completed in 2021 identified that population forecasts driven by urban land development meant that the service need was urgent. The project is unavoidable due to the rate of population growth in the Macedon Ranges region. Gisborne RWP is operating above its design capacity, which has led to instances of discharge to Jacksons Creek exceeding water quality limits. The ageing plant and equipment and site layout present safety risks to the operational staff. Managing these risks require controls that cannot be sustained permanently.
Risk addressed	 Environmental and regulatory/compliance risk: environmental risk, inability to meet GED Service Delivery risk: inability to service growth Health, safety and wellbeing risk: staff operational health and safety
Start year	2021-22
Completion year	2024-25
Total Capex over Regulatory Period (Real \$2023-24)	\$29.90 million
Total Project Cost (Real \$2023-24)	\$54.52 million

Project 8	Water supply reliability for Sunbury Bald Hill Tank Construction
Service	Water
Asset category	Pipelines/Networks
Cost driver	Growth
Description	To meet growth requirements, two new 10 ML steel welded water tanks are to be constructed at the Bald Hill site, Sunbury. The works include chlorine booster and inlet/outlet pipework.
Customer outcome	The project supports our customer outcome of your water is safe, consistent and resilient by increasing our water storage capacity to improve water security.
Background	The Sunbury Water Network Master Plan (2020) identifies the need for additional water storage capacity to be added in the Sunbury Water Network to meet demand. The Sunbury Water Network services the township of Sunbury, Diggers Rest and Bulla. Demand for water from the growing population within the Sunbury Water Network is forecast to exceed the existing supply capacity (conveyance and storage) by 2026.
	The tanks allow additional peak day balancing storage using the existing Sunbury water network. Project 4 (Holden Tank WPS and Transfer Main) will provide a future dedicated pipeline inlet to these tanks and maximise the benefit it provides to Sunbury.
Risk addressed	 Service delivery risk: reliable and secure drinking water supply for Sunbury, Digger Rest and Bulla increase network capacity to support future growth in the Sunbury Water Network.
Start year	2023-24
Completion year	2024-25
Total Capex over Regulatory Period (Real \$2023-24)	\$29.04 million
Total Project Cost (Real \$2023-24)	\$29.98 million

Project 9	Safe drinking water in Romsey Romsey WFP – New Filtration Plant
Service	Water
Asset category	Treatment
Cost driver	Growth
Description	Upgrade the Romsey Water Filtration Plant (WFP) to increase capacity and improve the water treatment process to comply with health-based targets. The upgrade includes the replacement of the existing Ultrafiltration (UF) Treatment Process with a Dissolved Air Flotation and Filtration (DAFF) based treatment system meeting future growth requirements.
Customer outcome	The project supports our customer outcomes of healing and caring for Country and your water is safe, consistent and resilient by improving water quality and security.
Background	Romsey WFP supplies the township of Romsey, servicing approximately 2000 lots, and is located approximately 61 km north-west of Melbourne. Raw water that feeds the plant is sourced from a combination of bores and surface water sources, each with its own unique water quality characteristics.
	A combined Master Plan was developed for Romsey and Lancefield WFPs in 2020. This plan highlighted the requirement for the delivery of a new WFP to meet regulatory and customer objectives for the subsequent 50 year period (to 2067).
	Romsey WFP does not have the water treatment capacity to meet existing peak demand. Interim controls put in place to manage this risk cannot be sustained long-term meaning that GWW would not be able to meet water quality guidelines in the future without this project.
Risk addressed	 Public health risk: water quality Service delivery risk: ability to meet peak demand ability to service growth
Start year	2023-24
Completion year	2026-27
Total Capex over Regulatory Period (Real \$2023-24)	\$27.83 million
Total Project Cost (Real \$2023-24)	\$27.83 million

Project 10	Supporting waterway health and growth in Romsey Romsey Recycled Water Plant
Service	Sewer
Asset category	Treatment
Cost driver	Growth
Description	Stage 1 plant upgrade of Romsey RWP to improve plant reliability and capacity. The upgrade includes new inlet works, expansion of the lagoon system and additional piping and pumping facilities to address hydraulic constraints.
Customer outcome	The project supports our customer outcomes of healing and caring for Country and your water is safe, consistent and resilient by improving water quality and security in the western region.
Background	The Romsey RWP was commissioned in 1978, with the last major upgrade being performed in 2002. The existing system is a lagoon-based plant. The Romsey RWP consists of inlet works, an aerated facultative pond followed by a facultative pond, 3 maturation ponds (arranged in series), 3 winter storages, and a system for disposing of the effluent by irrigation (Class C effluent).
	A Master Plan was developed for Romsey RWP in 2017. This plan highlighted the upgrade requirements for the plant to meet regulatory and customer objectives for the subsequent 50 year period (to 2066). A staged approach was proposed to meet these requirements, and this formed the basis for the Stage 1 Upgrade Project.
Risk addressed	 Environmental and regulatory/compliance risk: meeting GED compliance obligations Service delivery risk: inability to meet growth Health, safety and wellbeing risk: plant operability
Start year	2023-24
Completion year	2026-27
Total Capex over Regulatory Period (Real \$2023-24)	\$23.87 million
Total Project Cost (Real \$2023-24)	\$23.87 million

Appendix G: Capital programs

Programs of works outside of top 10 major projects (\$million, 2023-24).

Service	Program	Objectives of the program	Customer outcomes supported	Capital Expenditure
Water	Water Main Performance Renewals	Provide a reliable water service to customers by:	Your water is safe consistent and resilient.	197.66
		Preventing customers from exceeding >5 interruptions in a rolling 12-month period	When things go wrong, we fix them	
		Stabilising water main failure rate at current levels in the PS5 period		
	Water Main Risk Renewals	Prevent critical asset failures that occur on water service assets where the potential consequence of the failure poses an unacceptable risk.	Your water is safe consistent and resilient.	101.83
	Water Growth	New customers are provided with an affordable, reliable service from the day they require it.	We support our diverse customers and communities. We enable growth and help businesses to thrive	87.98
	Water Metering Program	To enable GWW to measure water usage and accurately bill customers for the water they use	Your water is safe, consistent, and resilient. We enable growth and help businesses to thrive	57.34
	Water Treatment Growth	Water Filtration Plants have the capacity to meet future water demand requirements	Your water is safe, consistent and resilient. We enable growth and help	46.77

Service	Program	Objectives of the program	Customer outcomes supported	Capital Expenditure
			businesses to thrive	
	Dams Works	Ensures health and safety risks associated with these assets are managed, and to maintain our compliance with ANCOLD obligations	Your water is safe, consistent, and resilient.	21.26
	Water Compliance	Maintain compliance with minimum flow and water quality requirements	Your water is safe, consistent, and resilient. When things go wrong, we fix them	20.70
	Water Tank Renewals	Prevent failures on GWW's critical water tanks to reduce unacceptable risks to customers, community, and the environment	Your water is safe, consistent, and resilient	15.32
	Water Treatment Renewals	Renewals required at Water Filtration Plants to ensure plants are able to maintain their reliability of service	Your water is safe, consistent and resilient. When things go wrong, we fix them	7.79
Sewer	Sewer Growth	New customers are provided with sewerage services from the day they require it.	We enable growth and help businesses to thrive. We support our diverse customers and communities	157.85
	Sewer Treatment Growth	Upgrade RWP's to ensure plants have the capability to meet inflow requirements and achieve compliance with GED.	Healing and caring for country We enable growth and help businesses to thrive	122.59

Service	Program	Objectives of the program	Customer outcomes supported	Capital Expenditure
	Sewer Performance Renewals	Provide reliable sewerage services to customers through: Preventing customers from exceeding >3 interruptions in a rolling 12-month period Stabilising sewer main failure rate at current levels in the PS5 period	Healing and caring for country When things go wrong, we fix them	79.43
	Sewer Risk Renewals	Prevent critical asset failures that occur on sewer service assets where the potential consequence of the failure poses an unacceptable risk.	Healing and caring for country	55.05
	Sewer Hydraulic Compliance	Upgrade pipelines and storages to contain one-in-five year flow rates within the sewerage network and minimise the risk of spills into the local waterways.	We heal and care for Country When things go wrong, we fix them	17.98
	Sewer Treatment Renewals	Critical renewals at Recycled Water Plants to ensure plants can maintain their reliability of service	Healing and caring for Country	10.17
Recycled Water	Western Irrigation Network	Ensure GWW is meeting its EPA and GED obligations while managing increased recycled water volumes to service a new irrigation district in the Parwan region in accordance with the Commonwealth funding agreement.	We heal and care for Country	29.95

Service	Program	Objectives of the program	Customer outcomes supported	Capital Expenditure
	Recycled Water Growth	Ensuring new customers are provided with an affordable, reliable service from the day they require it	We support our diverse communities and customers. We heal and care for Country	14.29
	Stormwater Harvesting	This program will include a competitive, merit-based funding model which will ensure funded stormwater harvesting projects can provide the greatest liveability and environmental benefits at the lowest cost.	We support our diverse communities and customers Heal and care for Country	12.84
	Recycled Water Renewals	Proactively manage critical Recycled Water tanks to reduce or potentially eliminate unacceptable risks to customers and the environment.	When things go wrong we fix them	6.84
	Other – Recycled Water	Renewal of irrigation infrastructure critical for supplying Recycled Water customers and minimising the discharge of recycled water to local waterways.	We heal and care for Country	2.68
Corporate	IT – Core Enabling Services	Works to support key technology infrastructure and underlying business enabling services.	We support our diverse communities and customers. When things go wrong, we fix them	70.06
	IT – Asset	Establishing foundational, fit for purpose systems and technology to support	Your water is safe, consistent, and resilient.	68.13

Service	Program	Objectives of the program	Customer outcomes supported	Capital Expenditure
		improved strategic and tactical decision making	When things go wrong, we fix them	
	IT – Core Business Development	Consolidation, development, and uplift of key platforms supporting our people, internal processes and capabilities to support our business services.	When things go wrong we fix them We support our diverse communities and customers We enable growth and help businesses to thrive	36.95
	Asset Monitoring	Enable greater visibility of the operational performance of GWW's physical infrastructure, allowing for improved real time monitoring and control.	Your water is safe, consistent and resilient. When things go wrong we fix them We support our diverse communities and customers	36.83
	Corporate Works	Funding to replace motor vehicle fleet Provide funding for replacement assets that are either end of life or no longer comply with relevant legislation	When things go wrong, we fix them	24.75
	IT – Billing & Customer	Work focusing on the completion of the billings and collections program, directly accessible customer and business facing solutions along with customer service communication and engagement channel improvements	We support our diverse customers and communities We enable growth and help business to thrive	21.99

Service	Program	Objectives of the program	Customer outcomes supported	Capital Expenditure
	Emissions Reduction	Support GWW's progress towards reaching its 2030 net zero emissions target in our Statement of Obligations.	We heal and care for Country	11.19
	ADOR capitalisation	Addressing the deliverability of our capital plan throughout the 2023- 24 to 2027-28 period and into the future	When things go wrong, we fix them We enable growth and help businesses to thrive	5.82

Appendix H: Operating expenditure

This appendix discusses in detail the operating expenditure performance over the current period, the justification of the base year, and all components that comprise of the operating expenditure forecast.

Throughout this appendix, GWW discusses the difference between actual operating expenditure incurred over the current regulatory period and operating expenditure that was used by the ESC to develop prices in the 2018 CWW determination and 2020 WW Determination. GWW is not a simple aggregation of the two pre-existing businesses, and costs have not been ring fenced to the prior organisations post-integration. The integration has fundamentally changed the manner in which we conduct our operations. Neither the 2018 CWW determination or the 2020 WW determination considered the cost impact of integration, as such the operating expenditure associated with integration was not incorporated into CWW or WW prices over the regulatory period. The considerable change to business structure and operation, as well as the lack of cost ring fencing needs to be taken into account in comparison between historical determination forecasts of operating expenditure and actual expenditure.

H.1 Current period performance

GWW's operating expenditure over the current regulatory period exceeded the ESC's 2018 determination for CWW and 2020 determination for WW by 7.9% or \$71.5 million. This is the result of integration expenses, transformation programs, external cost drivers and changes in obligations.

Operating expenditure per connection has increased over the regulatory period. A combined operating expenditure per connection for CWW and WW was forecast to decline from \$326 per connection in 2018-19 to \$303 in 2022-23 from the 2018 and 2020 determinations. Actual costs increased from \$326 per connections in 2018-19 to \$341 in 2022-23 for GWW. Note this is based on operating expenditure that excludes one-off adjustments in the 2022-23 year.

Customer connections have grown over the current regulatory period to be 1.32% higher in 2022-23 (relative to the 2018 CWW determination and the 2020 WW determinations). This is equivalent to 8,048 new water customers.

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Figure 47 Controllable opex per connection (\$, 2023-24)

GWW's operating expenditure over the current regulatory period (2018-19 to 2022-23) and our forecasts for next regulatory period(s) is grouped into four categories:

- **Costs associated with the integration of CWW and WW**: These are the core operating costs needed to consolidate the systems, people and processes of the two entities to enable delivery of the new integration to maintain CWWs and WWs level of service and water security.
- Costs associated with adding value and transforming our operating expenditure programs: integration provides a unique opportunity to transform our business to deliver services differently and meet legislative and regulatory requirements more efficiently, for example:
 - increased investment in **safety** transformation program and systems and processes to support our people in the field, which was identified as a key risk through the integration program
 - transforming **customer services** through COVID and as we transform service delivery to increase digital transactions.
 - maintaining, transforming and optimising our **asset delivery** processes (ADOR) to lower long term operating costs.
 - exploring long-term solutions to manage **compliance** with our EPA licence and Drinking Water Standards
 - streamlining key **corporate functions** to the new business model.
- **Changes in obligations**: these are costs that are not directly related to integration and are due to regulatory, policy and legislative changes.
- **External cost drivers**: these are costs that are not directly related to integration but are driven by changes in our external operating environment that have resulted in additional costs across operations and maintenance, IT and energy.

The remainder of this section discusses our current period performance through these four broad programs of works, and show the additional expenditure, or savings,

compared to the 2018 CWW determination and 2020 WW Determination. These four programs explain almost 90% of the above determination costs. The remainder are presented in Section H.2.1 under 'Efficiency of the base year.'

H.1.1 Current period performance: Integration

Integration costs are mostly administrative in nature such as:

- Consolidation of back-end systems: Both businesses had two sets of systems and a process was used for several back-end systems (such as payroll, HR, finance) to choose the most fit for purpose system going forward, import data and retire the un-used system.
- Workforce management: As the predecessor businesses both had executive management and a board, savings were able to be achieved almost immediately and through natural attrition.

The restructure of City West Water and Western Water was formalised by the acting Minister for Water in February 2021 through two ministerial determinations made under the *Water Act 1989*.^{xxvi} These two ministerial determinations along with the Minister's announcement placed obligations on the new entity (GWW) and its integration of CWW and WW. These included:

- all existing staff (executive and non-executive) would be transferred to the new entity
- all depots and offices would remain
- investment in upgrading the Sunbury office to increase capacity.
- In effect these determinations required GWW to integrate CWW and WW without rationalising our workforce, our depots or our offices.

	2020- 21	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26	2026- 27	2027- 28	10- year total
Opex	4.64	7.30	6.98	4.10	4.10	4.10	4.10	4.10	39.44
Efficiencies achieved	-0.82	-2.23	-2.93	-3.16	-4.10	-4.10	-4.62	-4.62	-26.57
Net opex	3.82	5.07	4.05	0.94	0.00	0.00	-0.52	-0.52	12.87
Net integration opex in the base (net opex less non-recurring)			1.19						
Additional integration opex in the forecast				-	-	-	-	-	
Integration efficiency from the base (new				-0.23	-1.17	-1.17	-1.69	-1.69	

Table 63 Integration opex and efficiencies over 2018-28 (\$million, 2023-24)

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	2020- 21	2021- 22	2022- 23	2023- 24	2025- 26	2026- 27	2027- 28	10- year total
efficiencies and costs removed)								

Initial costs were incurred in 2020-21 in preparation for the integration. To support the changes in policy and obligations on the newly formed business a dedicated integration team was established. The primary function of this team was to enable GWW to legally function on 1 July 2021. The integration team operated until 2022-23 resulted in direct additional non-recurring operating expenditure of \$12.2 million over the current regulatory period.

The integration team's program of works focused on consolidation of core systems, people and processes. The breakdown of integration costs since 2020-21 is shown in **Table 64**. These costs do not include transformation costs.

In total, the program cost \$12.9 million in net operating expenditure (operating expenditure less efficiencies) over the current regulatory period. A summary of all consolidation costs and savings from integration is presented in **Table 64**.

Item	Description	2020- 21	2021- 22	2022- 23
Assets	GWW currently operates two GIS systems and two operations and maintenance systems (Clarity and Kern). The alignment of the operations and maintenance systems is expected to occur in 2023-24 and will result in a small labour cost and licence saving (\$0.15 million). The alignment of GIS systems is proposed as a capital expenditure in the upcoming regulatory period and its alignment in 2026-27 will result in a small labour saving as well (<\$0.1 million). Furthermore, consolidation of CCTV contracts and as many as 200 procedures and processes for asset maintenance, repairs and general instructions/guidelines for contractors are being re-written to ensure a consistent level of service across the entire GWW region.	-	-	0.95
Customer services	With two different billing systems and two different call centres, there were activities undertaken to consolidate the processes. This included changes to the way the call centre operated and resulted in a short-term cost of \$0.4 million that will remain until the new billing system is implemented. This is offset by a small saving achieved by retiring old legacy communications.	-	0.20	0.40
Enterprise Agreements	GWW underwent a process to align the previously Western Water employees to the City West Water Enterprise Agreement (the prevailing agreement for GWW). This resulted in an	-	1.86	1.86

Table 64 Consolidation opex and savings over 2020-23 (\$million, 2023-24)

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Item	Description	2020- 21	2021- 22	2022- 23
	additional \$1.9 million step change in labour expenses from 1 July 2021.			
Finance	The previously City West Water finance system, Oracle, was chosen as the preferred finance system over the Western Water system. Whilst Oracle licence fees in total were more expensive than the legacy Western Water system, it provided greater functionality through its ability to track more cost centres and increased potential for upgrades rather than replacement. The net increase was an additional \$0.8 million.	-	0.79	0.79
HR and payroll systems	In 2021-22, GWW aligned its HR system for managing leave, performance plans, and recruitment, and its payroll system. CWW had recently invested in a new HR system across 2018 to 2020, and this was chosen to replace the WW system which had reduced functionality and was approaching its end of life.	-	-0.03	-0.03
IT	In the lead-up to integration and during the first year of integration, there was significant effort placed on consolidating and rationalising IT systems. Throughout this process several duplicate systems were amalgamated onto one of the legacy systems. This has resulted in a realised efficiency and more than offset the increases in testing requirements across the remaining two legacy systems.	-	-0.72	-0.62
Integration office	A dedicated team was established to manage the first couple of years of integration. This team created a work-program and delivered against it.	4.64	4.39	2.87
Management and board	An efficiency, through natural attrition of senior managers has been slowly achieved from the three years following integration with the evolution of our new operating model. This has resulted in a reduction in labour costs that will be maintained across the upcoming regulatory period.	-0.82	-1.44	-2.16
	The two legacy businesses had two boards of Directors. With the formation of GWW, the Minister appointed a new board which resulted in direct savings in 2021-22.			
Net opex		3.82	5.07	4.05

H.1.2 Current period performance: Transformation

This section details the additional costs and benefits of the transformation programs initiated during the current regulatory period.
Safety uplift transformation program

Our performance in relation to safety is driven by the development of our Health, Safety, Environment and Quality (HSEQ) system. Neither CWW or WW had a suitable health and safety system capable of complying with safety regulations and obligations, including the General Environmental Duty. The development of our system has resulted in additional operating expenditure over the current regulatory period of \$0.3 million in labour.

This program will result in future labour efficiencies when it comes into effect.

Table 65 Safety opex (\$million, 2023-24)

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Opex	-	-	-	-	0.29	0.29

Customer services transformation program

Over the regulatory period, GWW underwent a program to uplift its customer and community engagement program. We re-examined how our ongoing engagement can support price submission, strategy, corporate plan and general community and consumer sentiment work. The outcome was that the engagement program required additional resources to support the engagement activities as well as build productive working relationship with key partners in the region. The engagement team also supported the delivery of major capital works that were capitalised. The total opex cost of this uplift, including partnerships, is \$1.2 million per annum from 2022-23 and remains an ongoing expense.

A summary of the additional opex is presented in **Table 66**.

Table 66 Customer services opex (\$million, 2023-24)

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Opex	-	-	-	-	1.17	1.17

Managing compliance transformation program

Over the course of the regulatory period, GWW has experienced an increase in managing both water and sewer existing compliance obligations of \$10.4 million in total. These challenges have been driven by financial constraints over the last regulatory period leading to under-investment coupled with high growth, higher rainfall, and changes in treatment plant flows resulting from the shift to working from home.

 Table 67 Compliance opex (\$million, 2023-24)

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Opex	-	-	-	3.30	3.54	3.54

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Sewer compliance obligations

During the last regulatory period, the area previously served by Western Water continued to see higher than expected growth. The additional growth, along with higher rainfall, resulted in higher operating expenditure to maintain existing compliance at wastewater treatment plants. Further to this, the capital program was reprioritised to deliver works for new connections and additional operating expenditure was required to manage treatment plants that needed upgrades to remain compliant.

Overall to maintain compliance with EPA obligations, GWW has invested \$3.3 million per year from 2021-22 for wastewater treatment activities. The primary drivers of this cost increase are:

- chemical management to remove phosphorus and balance PH levels to achieve discharge quality (approximately \$0.3 million in 2021-22), and
- tankering, plant and pump hire used to manage water balance at our Northern Wastewater Plants because of capacity constraints resulting from the significant and exponential growth occurring across these catchments.

The additional costs associated with maintaining EPA compliance will not be eased until the treatment plants have been upgraded.

Sewer Quality Management System

GWW has commenced building a fit for purpose Sewage Quality System for its seven sewer catchments. It will reduce duplication of systems and be aligned with compliance obligations and standards. This includes acceptance and trigger requirements for our local treatment plants and acceptance criteria for trade waste agreements. Development of the new system commenced in 2023-24 at an additional cost of \$0.24 million and will deliver improved compliance.

Incident management

The incident and emergency management requires significant resourcing from the communications and engagement team. An incident will often result in a continued engagement for a period of time after the operational solution has been delivered. The previous FTE and budget were not sufficient to manage the growing number of incidents in the GWW catchment that have been driven by a lack of investment in asset solutions and a continued use of operational solutions, across the backdrop of climate change resulting in more frequent weather events. This takes time to reverse and will the continued spend is required into the next regulatory period.

Asset management transformation program

Since integration, GWW has identified a number of key areas that can be improved across all aspects of asset management. In particular, we have embarked on a program to increase capability, systems and processes in capital delivery program from planning and procurement through to delivery and commissioning. Further to this, there has been some movements in supporting functions for asset management, as well as materials and facilities costs.

Table 68 Asset management opex (\$million, 2023-24)

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
ADOR Opex (regulatory)	-	-	-	-	1.19	1.19
ADOR Capex (regulatory)	-	-	-	-	2.82	4.01
ADOR Opex (statutory)	-	-	-	-	4.01	5.20

Asset Delivery Optimisation Review (ADOR)

In 2022-23, GWW implemented a program call ADOR (Asset Delivery Optimisation Review) that will enable GWW to deliver on its capital program in a prudent and efficient manner. The current capital delivery function was tailored to the management of CWW's and WW's simpler capital programs which were predominately focused on pipes and pumps, without largescale treatment plant upgrades. After integration and an assessment of asset condition and risks, the ADOR program was developed to enable more complex program and projects to be delivered in a cost-effective way.

Included in the current regulatory period, is \$1.2 million operating expenditure associated with training and capability uplift (\$0.5 million) and pro-active procurement practices (\$0.7 million). The remainder of the expenditure has been proposed to be capitalised and rolled into the opening regulatory asset base on 1 July 2023. This is discussed in detail in Section 4.3 and Appendix I.

Streamlining corporate functions transformation program

GWW has put in place measures to streamline its corporate function. There have been some increases over that period, and some efficiencies have been achieved. These can be summarised as:

- Digital improvements: these costs have been driven largely by a change in the way of working and an increase in the role data has in decision making. These expenditures will result in better investment decisions and provide greater value to customers.
- Communications: these costs have increased over the period after an independent review identified under-investment in communications, along with the engagement functions, to manage the growing business.

 Table 69 Corporate opex (\$million, 2023-24)

	2018-19	2019-20	2020-21	2021-22	2022-23
Opex	-	-	-	-	0.76

Digital improvements

IT costs have increased at a faster rate than anticipated over the last regulatory period While CWW's determination included a step change for transition to cloud expenses, WW's determination did not. There have been additional costs because of integration, cyber security requirements, changes in the way of working, volume of users and improvements in accessibility and customer management. Specifically:

- Increase in the volume of users for core services GWW has seen a significant increase in its users (both regular labour and agency labour). From 2020 there were 800 users and now in 2023 there are 1500 users.
- GWW has been slowly upgrading and updating its systems to allow for all IT systems and software to be used by those who may have disability such as a visual or hearing impairment.
- Technology tools have been implemented to improve customer experience and management of customer complaints. The online portal was introduced to improve customer experience and allow small tasks to be managed through a self-serve menu.
- Cloud based services have continued to grow and with many organically growing throughout the period with moving to work from home and hybrid based work (such as Menti, Mural and JIRA). This growth is managed as much as feasibility possible through regular rationalisation of IT products and managed through centralised purchasing of IT products.

Communications

The capacity and capability of both the pre-existing CWW and WW communications and engagement teams were not sufficient to manage the increased demands for major projects and incident management engagement alongside ongoing community engagement that we experienced in the current regulatory period. The total cost of this uplift was \$0.8 million per annum from 2022-23.

GWW did a function review, with support from an independent third party, and found that GWW needed to increase capacity to deliver on core business as usual work and emergency management and incident respond functions.

From an external communications perspective, there was a need to manage all external channels, whether that be social media, media releases or external media, to ensure consistent and timely messaging. This resulted in a small uplift in the external communications team to ensure social media is monitoring regularly, and all media enquiries are handled appropriately.

H.1.3 Current period performance: Changes in obligations

Since 2018-19, GWW has experienced several changes in obligations. These are:

- First Nations and Traditional Owner engagement: GWW is required to engage with Traditional Owners, in particular around Action 4.2 from the Central and Gippsland Region Sustainable Water Strategy. This has come at a cost of <\$0.1 million. Further costs have been identified as a step change in opex further in this section.
- Payroll tax: in 2022-23, the Victorian Government increased payroll tax by 0.5% resulting in an additional \$0.5 million in opex.

• Superannuation guarantee: the Superannuation guarantee increased gradually from 9.5% in 2018-19 to 2020-21 to 11% in 2023-24. This resulted in an \$2.4 million increase over the regulatory period.

 Table 70 Changes in obligations opex and efficiencies (\$million, 2023-24)

	2018-19	2019-20	2020-21	2021-22	2022-23
Opex	-	-	-	0.38	1.33

H.1.4 Current period performance: External cost drivers

This section discusses in detail the additional costs GWW has faced that are external to the business. These are categorised as five items – field maintenance, energy, chemicals, information technology and insurance.

Table 71 External cost drivers impact on opex (\$million, 2023-24)

	2018-19	2019-20	2020-21	2021-22	2022-23
Opex	3.35	5.76	1.79	6.85	12.69

Two methods have been used to calculate the impact of external cost drivers over the period. Both approaches are relative to the 2018 CWW determination and the 2020 WW determination:

- Extrapolation method: Using the base year expenditure from the 2018 and 2020 Determinations and extrapolating the costs over the regulatory period using growth and efficiency forecasts. Adjustments have been included for any step changes approved in the two final determinations. This has been used for IT costs, insurance and field maintenance.
- Determination reported: Using the figures reported in the final determination financial models as provided to the businesses by the ESC. This has been used for energy and chemicals. IT was separately provided for but included labour which is captured elsewhere.

Field maintenance

Since the 2018 CWW determination and 2020 WW determination, GWW has seen a 5.7% average annual increase in its asset management costs. These are broken down into three categories:

- Responsive maintenance: when there is an unexpected asset failure.
- Preventative maintenance: when GWW takes proactive maintenance on an asset to minimise its likelihood of failure.
- Condition monitoring: when GWW undertakes activities to assess the condition of an asset, such as CCTV.

In total, this is \$6.96 million above the determination forecast. The cost drivers of this increase have been:

• Input cost increases in fuel, materials and labour.

- Meeting customer expectations on response and rectification times has come with an additional cost, particularly with the trend of faults in inner suburbs resulting in high transport time (especially around peak hours).
- Higher reinstatement costs driven by an increase in bursts and leaks in the inner urban and CBD area where there is a concrete sub-base and asphalt on top.
 Furthermore, with many services now competing for space in the street often pipes are in asphalt roadways and not on nature strips which is increasing the costs.

Customer and network growth has also resulted in higher costs. There have been a number of instances where newer assets have failed or have been damaged and require repaired.

The high growth experienced, particularly in the area previously served by WW, has resulted in a significant increase in temporary assets to serve out of sequence developments. This creates a more complex system than a sequential development and resulted in more maintenance and management of pumps in the system.

Higher customer growth in the area previously served by City West Water has resulted in more customers connecting to an asset. This has meant that over time, there are a greater number of higher risk assets that need to be prioritised in case of a failure.

Furthermore, there has been increased safety requirements placed on repair crews, particularly with the additional traffic management requirements imposed on GWW by Council and VicRoads. These safety requirements came into effect in 2018-19.

The total cost of field maintenance is summarised in **Table 72**.

	2018-19	2019-20	2020-21	2021-22	2022-23
Responsive maintenance	33.62	37.10	34.17	33.39	34.04
Preventative maintenance	6.51	6.66	6.04	9.30	9.33
Condition monitoring	1.23	1.25	1.22	0.96	2.38
Total field operations	41.35	45.00	41.44	43.65	45.75

 Table 72 Field maintenance opex (\$million, 2023-24)

Energy

Energy costs have increased over the recent regulatory period. This has been a result of increases in unit costs, changes in greenhouse gas emission costs and general increases in energy consumption.

Despite an increase in energy consumption in 2022-23, GWW experienced a significant decrease in average unit rates for electricity that resulted in a lower cost in the base year.

Table 73 Energy cost changes (\$, 2023-24)

	2018-19	2019-20	2020-21	2021-22	2022-23
Consumption (MWh) (A)	31,191	34,515	34,068	33,932	35,318
Average Unit rate (c per kWh) (B)	25.48	23.79	20.84	20.73	18.12
Offsets (\$m) (C)	0.00	0.00	0.32	0.31	0.32
Actual energy cost (\$m) (AxBx10+C)	7.95	8.21	7.10	7.03	6.40
Determination energy costs (\$m)	8.81	8.36	8.62	9.79	10.29
Actual less determination (\$m)	-0.86	-0.15	-1.52	-2.76	-3.89

Information technology

Overall, there has been a \$4.1 million increase in IT costs above determination allowances (incorporating approved step changes) using the extrapolation method. This has been driven by:

- Increases in the volume of users
- Increases in the per unit licence cost
- Increases in the number of systems we are managing.

Across the regulatory period, there has been observed significant cost increases over the last couple of years, with increases of between 7-12% per licence, in nominal terms. This includes core systems, such as Microsoft, increasing by 12% in nominal terms from 2021-22 to 2022-23.

GWW has sought out reduced fees for some smaller services to help offset to the increases, and when the new billing system is complete will go through a process to rationalise and optimise licences in the customer space to stabilise costs. This process will continue over the regulatory period, and as we continue to consolidate systems.

A summary of the above determination cost movements is provided in **Table 74**.

 Table 74 IT opex changes (excluding internal and contract labour) (\$million, 2023-24)

	2018-19	2019-20	2020-21	2021-22	2022-23
Opex	0.53	-1.45	-0.20	1.30	4.08

Insurance

Overall, there has been an increase in insurance premiums of \$3.6 million in 2022-23 compared to determination using the extrapolation method. The majority of these increases have come in the last two years.

The Australian insurance market has been significantly impacted by many factors, including the recent Australian flooding events at the end of 2022, continuing volatility in the Ukraine/Russia conflict, ongoing supply chain and labour challenges, and the recent natural catastrophe (floods and cyclones) in New Zealand. These events had significant impacts on overall global insurance markets, resulting in premium increases across all classes of insurance as insurers work to protect their losses by way of increased premiums and reduced cover or conditions. All of which were not favourable to our insurance renewal.

Table 75 Insurance opex changes (\$million, 2023-24)

	2018-19	2019-20	2020-21	2021-22	2022-23
Opex	0.03	0.05	0.02	2.88	3.64

Chemicals

Over the regulatory period, we saw a significant increase in chemical costs. In 2021-22, we had a small increase above determination of 0.3 million that has been captured in the transformation – compliance program as a step change. The remainder in 2022-23 of \$1.6 million and is driven by supply chain disruptions and increases in costs from suppliers.

Table 76 summarises the cost increases (excluding those captured in the transformation – compliance program).

Table 76 Chemical opex changes (\$million, 2023-24)

	2018-19	2019-20	2020-21	2021-22	2022-23
Opex	-0.17	0.14	-0.06	-	1.58

H.2 Forecast operating expenditure

We are forecasting a total of \$2,520.9 million over the 2024-25 to 2027-28 regulatory period. The composition of these forecasts is outlined in **Table 77**.

Our forecast operating expenditure is underpinned by two key assumptions:

- 1. A large efficiency program to deliver lower costs and greater value to customers.
- 2. Step changes in opex driven by new obligations, new capital works and customer driven outcomes.

 Table 77 Forecast controllable and non-controllable operating expenditure (\$million, 2023-24)

	2023-24	2024-25	2025-26	2026-27	2027-28	Total (4 year)
Baseline forecast	212.34	210.69	210.29	209.92	210.73	841.63

	2023-24	2024-25	2025-26	2026-27	2027-28	Total (4 year)
Baseline adjustment	4.47	7.49	8.23	9.08	9.69	34.49
Total controllable	216.81	218.18	218.52	219.00	220.42	876.12
Non-controllable	409.41	410.17	411.65	411.16	411.80	1,644.78
Total opex	626.22	628.35	630.17	630.16	632.22	2,520.90

The three components – baseline forecast (including growth and efficiency forecast), step changes and non-controllable operating expenditure – are discussed below.

H.2.1 Base year operating expenditure

In 2022-23, GWW's total operating expenditure was \$670.3 million. This total includes non-controllable expenditure, non-prescribed operating expenditure, revenue offsets and operating expenditure that is proposed to be capitalised under the regulatory framework.

To establish our base year expenditure, we are proposing a total adjustment of \$461.5 million (as itemised in **Table 78**). Once accounting for these adjustments, the total prescribed, controllable operating expenditure for the base year is \$209.6 million.

Category	Item	2022-23			
Opex as per statutory accounts					
Regulatory capitalisation	Billing and collections and other SaaS programs	-38.56			
	Capital delivery uplift (ADOR)	-2.82			
Non-prescribed opex	Operating expenditure for third party invoicing	-5.32			
Bad debt	Revenue offset of bad debt	-4.93			
Regulatory adjustment	Operating leases	6.08			
Opex as per regulatory	accounts	624.71			
Non-controllable	All bulk charges paid in 2022-23	-372.03			
	Licence fees and ECL	-37.18			

Table 78 Base year opex (\$million, 2023-24)

Category	Item	2022-23			
Controllable opex		215.49			
Non-recurrent expenditure	One-off integration expenses	-2.87			
	Preparation of the price submission	-1.09			
	Meter services contract review	-0.52			
	Labour cost adjustment	-0.08			
	Greater Melbourne Urban Water & System Strategy (GMUWSS) finalisation	-0.10			
	GSLs removal as we propose to absorb the costs	-0.38			
	Abnormal expenses (redundancy)	-0.83			
Adjusted baseline controllable opex					

Efficiency of the base year

Our adjusted base year is higher than the 2018 and 2020 determinations. GWW has removed non-recurrent operating expenditures. Over the regulatory period, we have sought to offset cost impacts through an increased focus on expenditure. Examples of this include:

- Annual corporate planning process: During the annual corporate planning process we complete a risk assessment and priority review of operating expenditure. This ensures that operating expenditure is spent on the right activities at the right time.
- Licence fee rationalisation: We frequently review our licence fee requirements, both if the software is still required and if it is still required by its users. This has enabled us to ensure that licence fees are only purchased and maintained for active users.
- State Purchasing Contract: GWW uses the State Purchasing Contract for a number of external services, including professional advisory, energy and several IT products and services.
- Workforce Resource Identification Planning committee: To ensure that our labour costs remain prudent and efficient, we review every vacant position and new position proposed in wholistically across the business before it can be recruited for. This ensures that the benefit of duplicate roles is captured, positions are fully justified, staff can be redeployed, and that any new positions fit into our workforce plan.

We note that the typical application of benchmarks to establish the efficiency of the base year is not possible. We are still optimising organisational structure, systems and

processes and there are no comparable water businesses with similar services and operating environment who are undergoing similar structural reform to allow for meaningful like for like benchmarking.

Where possible, we have used benchmarks to identify where GWW will be in the future.

Integration efficiencies in the base year

Our base year includes \$4.1 million of our ongoing costs (\$7.0 million less \$2.9 million non-recurrent integration costs) because of consolidation, the largest component is alignment of Enterprise Agreements at a cost of \$1.8 million and finance system alignment of \$0.8 million.

This is mostly offset by efficiencies achieved in 2022-23 that are embedded in the base year. The additional efficiencies beyond this (2023-24 less 2022-23 efficiencies) are included in our efficiency forecast.

	2020- 21	2021- 22	2022- 23	2023- 24	2024- 25	2025- 26	2026- 27	2027- 28	10-ye ar total
Opex	4.64	7.30	6.98	4.10	4.10	4.10	4.10	4.10	39.44
Efficiencies achieved	-0.82	-2.23	-2.93	-3.16	-4.10	-4.10	-4. 62	-4.62	-26.57
Net opex	3.82	5.07	4.05	0.94	0.00	0.00	-0.51	-0.51	12.87
Net integration opex in the base (net opex less non-recurring)			1.19						
Additional integration opex in the forecast				-	-	-	-	-	
Integration efficiency from the base (new efficiencies and costs removed)				-0.23	-1.17	-1.17	-1.69	-1.69	

 Table 79 Integration opex and efficiencies (\$million, 2023-24)

Base year comparison to determination

Our 2022-23 recurrent operating expenditure exceeded the CWW and WW determinations by approximately \$25.5 million plus \$5.9 million in one-off adjustments (non-recurrent items and capitalised items) from the base year.

The additional expenditure has primarily been driven by our directive to integration, transformation programs, changes in obligations, and external cost drivers. This comprises approximately 87% of the above base year ongoing expenditure. The other 11% of above determination costs are due to movements in labour.

Table 80 provides a summary of 99% of above determination operating costs. The remainder 1% is due to other small movements across the business.

Table 80 Reconciliation of above determination ongoing operating expenditure (\$million, 2023-24)

Category	2022-23 above determination ongoing opex	Reference to tables in the `Current period performance' section above
Integration	1.19	Table 63 : Integration opex and efficiencies over 2020-28
Transformation - Asset	1.19	Table 68: Asset management opex
Transformation - Compliance	3.54	Table 67: Compliance opex
Transformation - Corporate	0.76	Table 69: Corporate opex
Transformation - Customer	1.17	Table 66: Customer services opex
Transformation – Safety	0.29	Table 65: Safety opex
Changes in Obligations	1.33	Table 70 : Changes in obligations opex and efficiencies
External cost drivers	12.69	Table 71: External cost drivers impact on opex
Labour movements	3.00	See section 'labour cost movements' below
Total	25.16	

Labour cost movements

GWW has identified \$5.7 million above determination labour movements in 2022-23. This is a direct comparison between the 2018 CWW determination and the 2020 WW determination with the actual prescribed operating costs for labour incurred in 2022-23. Approximately \$2.7 million of this labour costs has been captured as part of our integration, transformation programs and changes in obligations. The remainder \$3.0 million is a result of:

- Both CWW and WW were operating with a lean labour force that was supplemented through external providers which resulted in a few key individuals who held a significant amount of corporate knowledge. We have shifted to an internal focus to increase corporate knowledge. This has meant as we have had to replace or redeploy key individuals we have needed to supplement the roles with additional resources create corporate artifacts that did not exist.
- Integration of the two businesses has created many strategic opportunities. This has meant we have increased expenditure in our strategic planning activities across customer, asset planning and compliance, engagement, water resources and

technology. This uplift will deliver benefits to customers over the coming regulatory periods through smarter capital expenditure, more integrated approaches to asset planning and compliance, and a smoother customer service experience.

 The integration occurred during the COVID-19 pandemic and a tightening labour market. This amplified the noise in the business. With a focus on strategic opportunities and the need to upskill staff, greater resourcing was needed in corporate support services, particularly in the people, culture and capability area. Additional resources were brought on to support recruitment including talent management as we reduce reliance on external service providers.

H.2.2 Operating expenditure baseline forecast

Our proposed forecast baseline is based on an average growth of 2.8% per annum and an average efficiency factor of 3.0% per annum. The efficiency factor is supported by forecast transformation and integration efficiencies.

Table 81 shows the baseline forecast incorporating the growth and efficiency factors.

	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Average / Total (4 year)
Growth		3.29%	3.03%	3.11%	2.58%	2.54%	2.81%
Efficiency		2.00%	3.80%	3.30%	2.75%	2.15%	3.00%
Net Efficiency		-1.29%	0.77%	0.19%	0.17%	-0.39%	0.19%
Baseline forecast	209.63	212.34	210.69	210.29	209.92	210.73	841.63

Table 81 Forecast controllable operating expenditure with growth and efficiency forecasts (\$million, 2023-24)

Growth

GWW is a newly integrated business with limited historical data on actual performance. While data exists for CWW and WW, it is unclear how these historical growth rates are relatable to the operating expenditure associated with the new integrated businesses GWW. Given the historical data does not provide a reliable basis for considering the historical impact of growth on operating expenditure, GWW proposes to adopt the ESC's established regulatory approach of using water connections growth rate as the growth factor. While sewer connections have been higher in recent years, typically it is water properties being connected to sewer rather than sewer only properties.

The growth rate proposed is based on the Victoria in Future 2022 forecast that has been used to forecast connections in Section 7.67.6.

The growth forecasts used are shown in **Table 82**.

Table 82 Growth forecasts

	2023-24	2024-25	2025-26	2026-27	2027-28	Average (4 years)
Proposed	3.29%	3.02%	3.11%	2.58%	2.54%	2.81%

Efficiency

GWW proposes an average annual compounding efficiency factor of 3.0%. Our proposal is based on bottom-up accounting of the efficiencies we are expecting to realise through our integration and transformation programs in addition to more broader efficiencies we are expecting to be achieved over time through economies of scale and scope.

Our efficiency forecast captures the following components (the annual profile of efficiency saving is outlined in **Table 83**):

- **Identified integration efficiencies**: Theses are efficiencies we will generate through our programs aimed at consolidating our people, systems and processes. They build on the efficiencies delivered from integration expenditure in 2022-23 and 2023-24, including an intermediate year efficiency of 2% that is consistent with the proposals in the 2018 and 2020 price submissions.
- **Identified transformation efficiencies**: These are efficiencies we have identified and quantified for our transformation program. They include:
 - uplift in **safety** investment and changes to asset construction through streamlining processes and procedures, and increases in remote meter reading
 - working towards improved customer services through COVID and as we integrate and transform our service delivery through increased e-billing and self-serve.
 - investment in permanent solutions to manage compliance and reduce operating expenditure on incidents and management of non-compliance
 - investing in our assets and developing consistent **asset management** processes
 - streamlining key corporate functions.
- Unidentified transformation efficiency target: As the transformation and integration programs progress, there are unquantified and/or unidentified efficiencies that can be delivered. We have proposed an efficiency target to address these and deliver the best off for our customers.
- **Residual (economies of scale and scope):** Residual efficiencies that can be delivered through economies of scale and scope. This is equivalent to a standard business under the PREMO framework of 1.4% efficiency.

Our proposed efficiency savings of \$31.2 million compared to the base year are presented in **Table 83**.

Table 83 Total forecast year on year efficiencies proposed relative to 2022-23 baseline (\$million, 2023-24)

	2023-24	2024-25	2025-26	2026-27	2027-28
Integration efficiencies	0.23	1.17	1.17	1.69	1.69

	2023-24	2024-25	2025-26	2026-27	2027-28
Identified transformation efficiencies	1.25	4.43	5.53	6.62	6.66
Forecast further transformation efficiencies	-	0.98	4.00	5.36	7.05
Residual efficiencies (1.4%)	2.73	5.80	9.02	12.35	15.79
Total efficiency proposed	4.19	12.39	19.73	26.02	31.19

Integration efficiencies

The integration program is in its final years and will deliver efficiencies over the 2024-25 regulatory period.

To date, a total of \$3.0 million per annum has been realised in benefits from integration. These are imbedded in our base year and reflected in our baseline forecasts. It is important to note that during the current period we have not sought to recover the consolidation costs associated with integration that have totalled \$18.9 million from 2020-21 to 2022-23.

From 2023-24 onwards, integration efficiencies will be delivered through:

- Moving to a single asset ecosystem to ensure the safety of all those in the field.
- Additional costs of managing the call centre, including SMS two-way chat costs that can be combined once the new billing system has become operational.
- Alignment of processes and procedures for maintenance, repairs, renewals and other operations to ensure that all assets are maintained and commissioned to the same standard.
- Reduction in incident management costs through alignment of incident management teams across GWW.
- Reduction in IT testing costs as systems align to a single system.

By the end of the regulatory period the efficiencies associated with integration will exceed the costs of integration that are imbedded in the baseline.

Transformation efficiencies

We have identified a total of \$6.7 million of efficiencies that will be delivered over the regulatory period across the five transformation programs. These are shown in **Table 84**.

 Table 84 Identified efficiencies proposed by transformation program relative to 2022-23 baseline (\$million, 2023-24)

	2023-24	2024-25	2025-26	2026-27	2027-28
Transformation – Asset Management	0.15	0.66	0.66	0.66	0.66

	2023-24	2024-25	2025-26	2026-27	2027-28
Transformation – Corporate	1.00	1.60	1.60	1.60	1.60
Transformation – Customer services		1.86	2.84	3.93	3.97
Transformation – Compliance	0.10	0.10	0.22	0.22	0.22
Transformation – Safety		0.21	0.21	0.21	0.21
Identified transformation efficiencies	1.25	4.43	5.53	6.62	6.66

All of these are described further below.

Asset management

GWW is continuing to improve its asset management functions. The efficiency program from 2023-24 will work to reduce expenditure in:

- Automation and maintenance processes: We are able to automate a treatment plant sensors and introduce systems and processes to manage maintenance activities that will save \$0.6 million per year by 2024-25.
- Depots: GWW inherited many deports from its legacy businesses and will be undergoing a process to rationalise the location of these depots and improving colocation with other assets. This could result in additional savings over the regulatory period, however it is unclear of the net impact until a full review is undertaken. We have included a small saving of <\$0.1 million in streamlining security at our depots.

Corporate functions

As we integrate all of our systems, processes and people additional efficiencies will be realised across the corporate functions:

- External support: reduction in consultant spend that can be delivered through increased use of the State Purchasing Contract.
- IT: As noted earlier, GWW has a strong focus on optimising its IT services. Through our continued rationalisation of IT licence fees program we are expected a reduction in operating costs, particularly as a new single system is deployed.
- IT delivery model review: A full review into the delivery model for IT services across GWW will be undertaken to deliver greater value for our customers. As the review is in its infancy we have not identified specific savings, but are incorporating this into our unquantified transformation efficiencies target.
- Workforce optimisation plan: Broadly across the whole of GWW, we are investing an workforce optimisation plan that will deliver reductions in FTEs and costs without compromising services. As the plan is yet to get underway we have not identified specific savings and are proposing to incorporate into our unquantified transformation efficiencies target.

Customer services

We are continuing to invest and change our services to fit the needs of our growing customer base. This will result in the following efficiencies:

- The billing and collections program will deliver up to \$4.0 million per annum by the end of the regulatory period.
- The alignment of billing systems enabled by both the billing and collections program and the new Water Industry Standard – Urban will enable us to deliver further savings (unquantified at this time) through:
 - improved call centre workforce management
 - self-reads of meters and reduce the number of special meter reads.
 - increased use of digital delivery of information to customers and result in reduced postage costs.

Compliance

As GWW continues to invest in its treatment plants and network of assets, this will lead to efficiencies in:

- Incident management: Reduced communications and engagement expenditure and through an alignment of technical incident management teams (\$0.1 million).
- Sewer quality management system: Savings from come from having an single sewer quality management system by 2025-26 (\$0.1 million).

Safety efficiencies

GWW has invested in improving safety for its staff, contractors and the public. The investments made and efficiencies to be achieved are:

- New Health, Safety, Environment and Quality (HSEQ) system: Neither CWW or WW had an appropriate HSEQ system to analyse and implement measures to improve outcomes for the business. The build of this system and process will lead to efficiencies in reporting and provide greater value to customers. Over time it is expected that a reduction in FTEs will be able to achieved. In total \$0.2 million per annum has been identified as an efficiency for the HSEQ systems.
- Operational technology: increases in operational technology in the field, improves customer value in reducing operational staffs need to visit remote meters and facilities. The investment will lead to an alignment of staff managing systems, reduce licence fees and provide a safer operating environment for our people in the field. The benefits from operational technology improvements will be realised in the following regulatory period.

Residual efficiencies

Residual efficiency is efficiency that is not directly related to the integration or transformation efficiencies outline above and includes:

- Unmeasured integration efficiencies relating to economies of scale and economies of scope
- Efficiencies related to ongoing activities and productivity improvements that are not integration or transformation related.

The residual efficiency target of 1.40% per annum has been chosen based on the ESC's standard PREMO operating expenditure expectations. This is the only efficiency

component that will be included in 10 year operating expenditure proposal for the following regulatory period (commencing 1 July 2028).

H.2.3 Key input cost assumptions

The operating expenditure forecast for each of the integration, transformation and residual expenditures in our baseline are underpinned by five key cost categories energy, chemicals, labour, IT and operations and maintenance. This section steps through our forecasting approach to these.

Input costs: energy

Energy consumption over the four-year regulatory period is forecast to increase by 1.8% per annum. This reflects the forecast increase in consumption due to new connections, new Western Irrigation Network capital investments and increases in treatment volumes at the West Werribee Recycled Water Plant. Both of these projects are unrelated to growth.

The cost of electricity is primarily driven by three key components: the retail electricity price, network charges and environmental and other charges. All GWW's sites are contracted via the Department of Treasury and Finance's (DTF) State Purchase Contract (SPC).

To develop the energy forecast, we have adopted the forecast cost assumptions based on the Schneider Electric Energy and Sustainability Services reports.^{xxvii, xxviii} forecasts (Schneider report). This report was commissioned by the Victorian water industry's Intelligent Water Network's Greenhouse and Energy Special Interest Group, in collaboration with DEECA in April 2023. Prices are forecast to increase in 2024-25 and then remain relatively stable (and decline slightly) in real 1 January 2024 terms over the next regulatory period.

GWW has completed a cost build-up on a site by site basis to calculate the total energy consumption and costs. These sites have been allocated to small, medium and large based on volume of electricity at each site.^{xxix} The total consumption and average price per kWh at each site (excluding offsets) is presented in the **Figure 48**.



Figure 48 The total consumption and average price per kWh at each site

For offsets, GWW has a contract to end of 2029-30 with the Zero Emissions Water (ZEW) project that provides for Large Generation Certifications (LGCs) at a contracted rate of \$14.35 per MWh (nominal). GWW's share of the electricity generated is 29.86% and using the Marginal Loss Factor of 0.8775 as set by AEMO in calendar year 2024, this equates to 20,588 MWh of LGC certificates. Further offsets are forecast as part of the by the Victorian Government forecast for Victorian Renewal Energy Target 2 (VRET2). This forecast is \$46.65 per MWh (nominal). A summary of GWW's forecast offset costs is presented **Table 85**. This approach will enable net zero to be achieved by 2030 alongside behind the meter investments made by GWW.

Table 85 Energy offset breakdown (\$, 2023-24)

	2023-24	2024-25	2025-26	2026-27	2027-28
ZEW					
Price per LGC (\$ per MWh)	14.35	13.86	13.40	12.94	12.51
Quantity (MWh)	20,588	20, 588	20, 588	20, 588	20, 588
VRET2 in SPC					
Price per LGC (\$ per MWh)	46.65	45.07	43.55	42.08	40.65
Quantity (MWh)	0	5,462	10,794	10,878	12,097

	2023-24	2024-25	2025-26	2026-27	2027-28
Total cost (\$m)	0.30	0.53	0.75	0.72	0.75

GWW has deflated all nominal forecast values in the Schneider report using the ESC's 3.5% inflation forecast. Overall, total energy costs are expected to grow at 3.6% per annum in real terms, or 15.1% in total across the four-year regulatory period. This is shown in **Table 86**.

Table 86 Energy cost forecast (\$million, 2023-24)

	2023-24	2024-25	2025-26	2026-27	2027-28	Total (4 year)
Existing assets	6.02	7.00	6.69	6.26	6.52	26.47
New and upgraded assets	0.39	0.45	0.46	0.45	0.44	1.81
Environmental costs	0.30	0.53	0.75	0.72	0.75	2.75
Total	6.70	7.99	7.89	7.43	7.71	31.03

Input costs: IT

IT expenditure is a key enabler of our business and prudent and efficient investment in IT delivers efficiencies in other parts of the organisation. IT enables the secure access to GWW's IT application resources where all processes, communications, data and reporting services. These facilitate business reliance as the use of technology and digital capabilities remains fundamental to virtually all business-as-usual activities.

Our forecast IT expenditure covers managed IT services, IT licensing, IT support and IT maintenance across on-premise and cloud based services. Enabling secure and resilient data and cyber security across IT underpins GWW's IT/OT/SCADA solutions and remains of paramount importance to numerous critical infrastructure services.

The forecast has been developed using the 2022-23 total IT opex (excluding internal and contracted labour) of \$16.6 million with no forecast growth in this base cost. IT costs increase of the period to reflect the requirements of Security of Critical Infrastructure and the new costs associated with the Billing and Collections system. This has been offset by two identified efficiencies of:

- the efficiencies in IT from the new Billing and Collection System (\$1.3 million from 2024-25), and
- integration efficiencies to be realised in 2026-27 as result of further system consolidation (<\$0.1 million).

Table 87 IT cost forecasts (\$million, 2023-24)

	2023-24	2024-25	2025-26	2026-27	2027-28	Total (4 years)
Proposed	18.71	20.13	20.35	20.47	20.58	81.52

Input costs: labour

Labour costs is GWW's largest controllable operating expenditure item and comprises over one-third of controllable operating expenditure.

We have set ambitious efficiency targets across the next regulatory period for operating costs, including labour costs. These efficiencies are possible due to:

- the increases in change management professionals employed through integration and transformation,
- slowly removing duplicate roles across the organisation, and
- increase in the enabling functions of the business (corporate services, human resources) during the transition period.

The proposed operational model review will deliver the benefits of the program.

Our labour costs overall are relatively steady over the forecast period. We anticipate the savings associated with labour costs to be equivalent to the step change in superannuation and payroll tax changes that have been incurred in 2023-24 and will occur during the regulatory period. This is equivalent to \$7.9 million and is discussed further in Appendix H below and not included in **Table 88** below.

The forecast is based on no real price increases in wages. This is consistent with the Victorian Government <u>Wages Policy and Enterprise Bargaining Framework</u>. This applies a 3.0 per annum growth in wages.

Table 88 Labour cost forecasts (\$, 2023-24)

	2023-24	2024-25	2025-26	2026-27	2027-28	Total (4 years)
FTE forecast (excludes capitalised FTEs)	642	637	636	635	635	
Average cost per FTE (\$)	122,949	122,949	122,949	122,949	122,949	
Total labour cost (\$m)	78.97	78.36	78.21	78.07	78.07	312.72

Input costs: chemicals

Over the next regulatory period, chemicals are forecast to increase on average by 3.5% per annum. This increase in costs is primarily driven by increases in the quantity of chemicals as a result of new customer connections. We have benchmarked our

chemicals costs across a number of different suppliers to ensure that we have the lowest cost, reliable supplier to deliver value for our customers.

Table 89 Chemical cost forecasts (\$million, 2023-24)

	2023-24	2024-25	2025-26	2026-27	2027-28	Total (4 years)
Proposed	3.72	3.89	4.04	4.15	4.27	16.35

Input costs: field maintenance

We maintain over 15,000 km of network, and as this continues to grow and change, the cost of maintaining it will grow.

Operations and maintenance costs are:

- Responsive maintenance: when there is an unexpected asset failure.
- Preventative maintenance: when GWW takes proactive maintenance on an asset to minimise its likelihood of failure.
- Condition monitoring: when GWW undertakes activities to assess the condition of an asset, such as CCTV.

GWW currently operates the two legacy CWW and WW models for operations with a mix of in-source and out-source functions. As with all costs, we will continue to optimise the delivery of operations and maintenance activities to ensure customers receive the service levels we have committed to at a fair and reasonable cost. We are not proposing any increases in operations and maintenance costs outside of inflation, and as such cost per connection is expected to decline over the period.

Table 90 Field maintenance forecasts (\$million, 2023-24)

	2023-24	2024-25	2025-26	2026-27	2027-28	Total (4 years)
Proposed	49.16	46.79	46.80	46.80	46.80	187.20

H.2.4 Operating expenditure baseline adjustments

This section steps through the detail that comprises our proposed baseline adjustments of \$34.5 million over the four year regulatory period, as described in **Table 91**.

	2023-24	2024-25	2025-26	2026-27	2027-28	Total (4 years)
Step changes	4.47	7.49	8.23	9.08	9.69	34.49

 Table 91 Baseline adjustments

Baseline adjustments: obligations and policy and changes

This section outlines the changes in obligations and policy that are driving our proposed baseline adjustments.

First Nations and Traditional Owner engagement

- Our obligations to formally engage with Traditional Owners have increased since the last price review and the Water for Victoria (2016) policy was enacted. Since then, commitments have been made in the Central and Gippsland Region Sustainable Water Strategy (CGRSWS 2022) that require water corporations to:
- return water to Traditional Owners
- support removal of barriers to water ownership
- strengthen the role of TOs in water planning and management.

The Victorian government released Water is Life in 2023. This is a key policy initiative to increase Traditional Owner access to water and management of water landscapes on Country. It builds on legislation that was passed in 2019 to enshrine Aboriginal cultural values and knowledge in water and catchment management into law for the first time and to include Traditional Owners in these processes.

The Melbourne metropolitan water corporations' joint Urban Water Strategy, the Greater Melbourne Urban Water and System Strategy: Water for Life (GMUWSS), underpins these commitments through its approach to building partnerships with Traditional Owners.

GWW is committed to partnering with Traditional quality of Owners to provide the opportunity for their voices to be included in our water planning and management decisions. We have five formally recognised Traditional Owner organisations inour service region:

- Bunurong Land Council Aboriginal Corporation
- DJAARA (formerly Dja Dja Wurrung Clans Aboriginal Corporation)
- Taungurung Land and Waters Council
- Wadawurrung Traditional Owners Aboriginal Corporation
- Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation.

Over the coming regulatory period, we will uplift our internal capability and understanding of how to engage and partner with the Traditional Owners in our service area to support their water aspirations and meet our obligations. At the same time, we will also need to provide funding:

- to support Traditional Owners to increase their foundational knowledge at priority sites (including Cultural Values and Aboriginal Waterway assessments)
- for policy and partnership agreements
- to increase Traditional Owner capacity to meaningfully engagement with us on our projects and initiatives.

The program was informed through discussions with Traditional Owner groups, learnings from existing engagement, Traditional Owners' aspirations articulated in Nation statements, Country plans and available water strategies, and utilising Water is Life over the next five years. It aligns with the aspirations of our individual Traditional Owner groups. The annual forecast, on average, of \$1.0 million per year over the four-year regulatory period as a result of the new obligation. This is \$4.0 million cost is in addition to the small cost (<\$0.1 million) in the base year, as identified above. The operating

expenditure cost allows for an additional staff, Aboriginal Waterway and Cultural Value assessments, and funding for partnerships and engagement fees.

	2023-24	2024-25	2025-26	2026-27	2027-28	Total (4 years)
Proposed	0.22	0.62	0.92	1.22	1.22	3.97

Table 92 First Nations and Traditional Owner engagement adjustments (\$million, 2023-24)

Security of Critical Infrastructure

The Security of Critical Infrastructure (SOCI) Act came into effect in 2018. State the obligations under the act. The *Security Legislation Amendment (Critical Infrastructure Protection) Act 2022* (SLACIP Act) amends the *Security of Critical Infrastructure Act 2018* (the SOCI Act) to build upon the existing framework and uplift the security and resilience of Australia's critical infrastructure.

GWW has been identified as a critical infrastructure entity by the Department of Home Affairs under the amended Act. As an Australian Critical Infrastructure organisation, we are required to meet the requirements of the Security of Critical Infrastructure Act. GWW must implement adequate risk management controls to secure our critical infrastructure (this includes physical, personnel and logical security, supply chain and natural hazards). The Risk Management Program rules commenced as of 17 February 2023 and the amended legislation that identified us as critical infrastructure entity was released in March 2023, as such the expenditure commences in 2023-24.

The additional operating expenditure will be for:

- an additional resource to increase internal capability in dealing with operational technology security
- licence costs to manage operational technology and vulnerability, supply chain monitoring solution, physical security solution (access controls), and implementation of AUSCHECK for critical workers
- cyber and other emergency incident preparedness
- security operations centre, independent maturity reviews and training for key staff.

	2023-24	2024-25	2025-26	2026-27	2027-28	Total (4 years)
Proposed	0.68	0.99	1.09	1.20	1.20	4.47

 Table 93 SOCI adjustments (\$million, 2023-24)

Superannuation and payroll tax

The federal government is increasing the superannuation guarantee over the next regulatory period. It will increase from the current rate applied in 2022-23, the base year, of 10.5%, to 12% in 2025-26 by 0.5% increments.

In the 2023 and 2024 budgets, the Victorian Government introduced additional payroll tax levies that apply for the upcoming regulatory period. In total, GWW will pay an

additional 1% of payroll tax, half of which has been captured in the base year of 2022-23.

As we are undergoing a workforce optimisation and operating model review, we are not proposing to pass on these additional costs. Any addition costs associated with payroll tax and superannuation will be offset by the change in FTEs.

The incremental cost of this superannuation and payroll tax change, considering any changes in forecast FTEs, is presented in **Table 94**.

	2023-24	2024-25	2025-26	2026-27	2027-28	Total (4 years)
Superannuation	0.48	0.97	1.45	1.45	1.45	5.31
Payroll tax	0.50	0.50	0.51	0.50	0.50	2.02
Total cost on current workforce	0.98	1.47	1.96	1.95	1.95	7.33
Total proposed	0.00	0.00	0.00	0.00	0.00	0.00

Table 94 Superannuation and payroll tax adjustments (\$million, 2023-24)

Baseline adjustments: operating costs from new assets

A step change is proposed to reflect the additional operating expenditure of the following new assets:

- Macedon ranges transfer augmentation: The augmentation for water transfer up to Macedon Ranges changes the operation of Rosslynne Water Filtration Plant. Water will now be received into the reservoir and plant from Melbourne Water all year round compared to only during peak times (November to March). This results in an increase in operating expenditure of \$0.68 million ongoing, with a partial increase of \$0.21 million in 2026-27 to align with project completion.
- Romsey Recycled Water Plant upgrade: The additional expenditure for the Romsey Recycled Water Plant is required once the plant is commissioned in 2026-27. The additional expenditure of \$0.14 million per year due to increase in energy used, chemicals used and regular maintenance as a result of the upgrade.
- Romsey Water Filtration Plant upgrade: The water filtration plant at Romsey will be commissioned in 2025-26 to improve the water treatment process and ensure that it complies with the Health Based Targets for drinking water. The delivery of safe drinking water requires additional operating expenditure of \$0.22 million per year to maintain the plant along with small additional costs for chemicals and power.
- Western Irrigation Network: GWW has been investing in a major recycled water irrigation scheme in the Parwan-Balliang agricultural district. The supply of recycled water to irrigators in the area provides a solution for the sewage produced from the growing population of Melton, Sunbury and Bacchus Marsh regions. The additional costs identified commence in 2023-24 and increase throughout the period as the uptake of recycled water increases.

All other capital expenditure does not have a significant change to existing operating expenditure and can be managed within existing budgets.

Table 95 New asset adjustments (\$million, 2023-24)

	2023-24	2024-25	2025-26	2026-27	2027-28	Total (4 years)
Macedon Ranges Transfer Augmentation	-	-	-	0.21	0.68	0.89
Romsey RWP	-	-	-	0.10	0.14	0.24
Romsey WFP	-	-	0.20	0.22	0.22	0.64
Western Irrigation Network	0.78	0.80	0.82	0.84	0.85	3.31
Total	0.78	0.80	1.03	1.38	1.88	5.08

Baseline adjustments: IT operating costs

With the new billing and collections system (top 10 major project summary included in Appendix F GWW will have an increase in operating expenditure of \$15.8 million over the four-year regulatory period. It is a result of additional operating expenditure in licence fees that are relatively consistent over the period at \$4.1 million per year by 2027-28.

The new billing and collections system will deliver efficiencies and has been captured as an identified transformation efficiency in the financial template and itemised in the efficiency section above.

 Table 96 Incremental IT operating costs (\$million, 2023-24)

	2023-24	2024-25	2025-26	2026-27	2027-28	Total (4 years)
Proposed	1.40	3.79	3.90	3.99	4.09	15.77

Baseline adjustments: customer led changes to the customer support program

During our customer engagement program, there was significant support for increasing our services to support vulnerable customers and people experiencing payment difficulties. A significant driver of this is the cost of living crisis and high inflationary period. This is likely to increase the number of customers experiencing financial difficulty over the next few years.

Further to this, changes to the recent Water Industry Standard – Urban has increased the eligibility for customer support program to small businesses. As GWW has a high

proportion of non-residential customers, this may result in a significant increase in the support required.

The proposed \$1.3 million per annum increase in the hardship program is an almost doubling of the program. It will provide for:

- Additional staff to enable us to send consultants to customers' homes to assist our culturally and linguistically diverse community and customers who may have lower literacy levels.
- Proactive identification of more customers experiencing hardship and vulnerability that will allow for early intervention and support.

	2023-24	2024-25	2025-26	2026-27	2027-28	Total (4 years)
Proposed	1.30	1.30	1.30	1.30	1.30	5.20

 Table 97 Customer support adjustments (\$million, 2023-24)

H.2.5 Controllable operating expenditure proposal

GWW's total controllable operating expenditure for the four-year period ending 2027-28 is \$876.1 million.

Our proposal provides for a material decline in operating expenditure per connection from \$341 in 2022-23 to \$310 by the end of the upcoming regulatory period.

 Table 98
 Forecast controllable operating expenditure (\$, 2023-24)

	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	Average / Total (4 years)
Growth		3.29%	3.03%	3.11%	2.58%	2.54%	2.81%
Efficiency		2.00%	3.80%	3.30%	2.75%	2.15%	3.00%
Net Efficiency		-1.29%	0.77%	0.19%	0.17%	-0.39%	0.19%
Baseline forecast (\$m)	209.63	212.34	210.69	210.29	209.92	210.73	841.63
Baseline adjustments (\$m)		4.47	7.49	8.23	9.08	9.69	34.49
Total (\$m)	209.63	216.81	218.18	218.52	219.00	220.42	876.12
Total (\$ per connection)	341	341	333	324	316	310	

H.2.6 Non-controllable operating expenditure

We source over 90% of our water from our bulk suppliers, Melbourne Water and Southern Rural Water. Melbourne Water treats over 85% of our sewage. Along with bulk costs, we also pay licence fees and levies to government authorities. Over the next four years, we are forecast to pay \$1,644.8 million in non-controllable operating expenditure. This accounts for two-thirds of total operating expenditure.

Table 99 provides an itemised list of non-controllable costs that are paid to different entities.

Table 99 Non-controllable operating expenditure (\$million, 2023-24)

	2023-24	2024-25	2025-26	2026-27	2027-28	Total (4 years)
Melbourne Water – water	257.89	256.53	255.41	255.78	257.10	1,024.82
Melbourne Water – sewerage	112.61	115.92	119.64	119.78	120.10	475.45
Melbourne Water – recycled water	0.73	0.73	0.73	0.73	0.73	2.92
Southern Rural Water – water	2.58	2.59	2.60	2.66	2.71	10.56
Goulburn-Murray Water – Goulburn and Murray water entitlements	0.47	0.42	0.40	0.40	0.39	1.61
Barwon Water – Access to Melbourne Geelong Pipeline	0.32	0.32	0.32	0.32	0.32	1.30
Licence fees – Essential Services Commission	0.56	0.56	0.56	0.56	0.56	2.26
Licence fees – Department of Health	0.19	0.19	0.19	0.19	0.19	0.76
Licence fees – Environment Protection Authority	0.14	0.14	0.14	0.14	0.14	0.54
Environmental Contribution Levy	33.91	32.77	31.66	30.59	29.55	124.56

	2023-24	2024-25	2025-26	2026-27	2027-28	Total (4 years)
Total	409.41	410.17	411.65	411.16	411.80	1,644.78

Melbourne Water bulk charges

GWW pays bulk charges to Melbourne Water for treatment and transport of water and sewage. This is our largest single operating expenditure cost, accounting for 59% of total operating expenditure. Melbourne Water has provided us with a forecast of prices for the regulatory period.

GWW also pays Melbourne Water for the supply of Class A recycled water. This water is further treated at the West Werribee Salt Reduction Plant to lower its salt content.

These costs are forecast to grow in line with GWW's demand for bulk services and, in the case of water and sewage, in line with the price paths set out in Melbourne Water's 2021 determination, with stable prices assumed thereafter. We have assumed that current negotiated rates for bulk recycled water will remain stable.

Southern Rural Water bulk water charges

GWW sources raw water from storages owned and operated by Southern Rural Water. We pay an annual fixed fee regardless of the volume of water drawn. Southern Rural Water provided us with a forecast annual fixed fee from its 2023 price determination.

Goulburn-Murray Water Bulk water charges

GWW has a total of 30.5 GL of entitlements within the Murray and Goulburn systems. We will continue to pay bulk entitlement storage fees to Goulburn-Murray Water during the next regulatory period. As Goulburn-Murray Water's price review is running concurrently to ours, we have based our forecast on data provided to us on 18 July 2023.

Prior to the final determination, we will work with the Goulburn-Murray Water and the ESC to finalise this forecast.

Access to Melbourne Geelong Pipeline

GWW entered into an access arrangement with Barwon Water to use the Melbourne Geelong Pipeline. This pipeline has been an important to ensure reliability of water in the south-western part of our network.

Licence fees

We pay licence fees to three government agencies as part of our operating licence. These are paid to Department of Human Services (Drinking Water), Environment Protection Authority (EPA Licence), and Essential Services Commission (ESC licence). These are based on the costs incurred in 2022-23 and are consistent with the financial template.

We allocate drinking water to our water costs, EPA licence to sewerage and recycled water, and the ESC licence fee is across all products.

Environmental Contribution Levy

GWW pays the Environmental Contribution Levy to DEECA. This is a nominal cost to us of \$34 million per year and has been deflated by the inflation assumptions in our financial template. These are based on the costs incurred in 2022-23 and is consistent with the financial template.

Appendix I: Capitalisation of operating expenditure

I.1 Regulatory treatment of SaaS/IT projects

The accounting treatment of the expenditure associated with these projects would see it expensed and not capitalised. The accounting rationale is based on the license for Oracle CCS under a SaaS arrangement provides a right to receive access rather than a right to use the software. As such it does not meet the requirements to be classified as either a lease or an intangible asset.

This element of 'control' is not defined in the regulatory space, and the differentiation of capital and operating expenditures refers more to whether it is day-to-day operations or an investment in non-current assets.

This is consistent with the Regulatory Accounting Code: xxx

- Operating costs means those costs which relate to the day-to-day operations of the water business
- Capital expenditure means any expenditure, which has been disclosed as a noncurrent asset in the balance sheet of the water business' statutory accounts provided that the expenditure conforms with at least one of the following:
 - the expenditure relates to the purchase, development or construction of a new non-current asset of the water business;
 - the expenditure will increase the capacity or functionality of the water business' non-current assets;
 - the expenditure will significantly reduce the ongoing maintenance of the water business' non-current assets; and/or
 - the expenditure will extend the service life of the water business' noncurrent assets beyond that expected when the assets were originally installed.

As such, we are proposing to treat SaaS and other discrete IT projects operating expenditure as capital expenditure and align the cost recovery of the program with the time period of the benefits. This is based on the following rationale:

- Our new billing and collections system (Platypus) and the other discrete IT projects are expected to have a life and provide benefits to GWW and its customers over a period greater than one year. This would align the cost recovery of the program with the time period of the benefits.
- Consistent with ESC's approach of forecasting operating expenditure as to comprise of the recurring controllable costs (Box 3.2 of 2024 Guidance Paper) as Program Platypus is lumpy and once-off.
- Consistent with ESC's 2024 Guidance Paper (pages 34-35), where businesses may propose to capitalise certain statutory operating expense:
 - `In the case of a major IT-related project, the development and implementation costs of a new system might be justified as capital expenditure and recovered over the expected life of the new system'

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 'large irregular operating costs that are not incurred every regulatory pricing period but provide a customer benefit over two or more regulatory periods'.

The ESC had already approved the capitalisation of operating expenditure related to Platypus in the 2021-22 regulatory accounts, this accounted for \$22 million (real, \$2023-24) in the opening RAB for 2022-23. In nominal terms, this is made up of \$0.3 million for 2019-20, \$5.4 million for 2020-21, and \$13.8 million for 2021-22, which sums to \$19.5 million over the three-year period.

In line with the above treatment, we are proposing to capitalise operating expenditure of \$28.1 million related to the Platypus program, and a further \$10.4 million operating expenditure related to other discrete IT projects. In total, we are proposing to capitalise \$38.6 million of SaaS/IT projects for 2022-23, which is reflected in our 2022-23 regulatory accounts, as shown in **Table 100**. We have identified and excluded all operating expenditure related to licencing and ongoing operating costs such as operations and maintenance of the network.

	2019-20	2020-21	2021-22	2022-23	Total
Platypus (SaaS)	0.38	6.17	15.48	28.12	50.16
Other discrete IT projects	-	-	-	10.44	10.44
Total SaaS/IT capitalised opex	0.38	6.17	15.48	38.56	60.60

 Table 100 Capitalisation of operating expenditure for SaaS/IT projects (\$million, 2023-24)

We are proposing to depreciate the above total SaaS/IT capitalised opex over a period of 15 years. These IT projects involved significant upfront investments in hardware, software, and staff, and will provide long-term benefits to GWW and its customers. A 15-year period allows for the costs to be spread out over a longer duration, aligning with the expected lifespan and usefulness of these projects.

We have accounted for this regulatory treatment as follows:

- \$38.6 million has been transferred from operating expenditure to the capital expenditure in the 2022-23 regulatory accounts; therefore, it is reflected in the opening RAB for 2023-24 in ESC's pricing model (specifically, it is included in the 2022-23 gross capex of \$342.4 million).
- \$60.6 million (book value) and 15 years (average asset life) is reflected in the ESC's pricing template (RollForward_FO tab), to ensure the regulatory depreciation is applied over the useful life of these capitalised amounts.

I.2 Regulatory treatment of Asset Delivery Organisational Review (ADOR) program

In 2022-23, GWW implemented a program call Asset Delivery Optimisation Review. The current capital delivery function was tailored to the management of CWW's and WW's

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simpler capital programs which were predominately focused on pipes and pumps, without largescale treatment plant upgrades. After integration and an assessment of asset condition and risks, the Asset Delivery Organisational Review program was developed to enable more complex program and projects to be delivered in a cost-effective way.

In 2022-23, we incurred operating costs related to ADOR of \$4 million. Of this, \$1.2 million operating expenditure associated with training and capability uplift (\$0.5 million) and pro-active procurement practices (\$0.7 million). These have been identified as ongoing costs related to Asset Delivery Organisational Review. We are proposing to treat the remainder \$2.8 million of the operating expenditure as capital expenditure and roll it into the opening RAB for 2023-24.

We are proposing to capitalise this on the basis that it is a large irregular operating cost that will not be incurred every regulatory pricing period but will provide customers benefit over two or more regulatory periods.

Moreover, we are forecasting Asset Delivery Organisational Review -related total expenditure (totex) of \$5.2 million (2023-24) and \$3 million (2024-25), which will be expensed as operating expenditure in the statutory accounts. However, we are proposing for a similar split as applied in the 2022-23 regulatory accounts, where after removing for ongoing costs of \$1.2 million, we propose to capitalise the remaining \$4 million for 2023-24 and \$1.8 million for 2024-25, as shown in **Table 101**.

	2022-23	2023-24	2024-25	Total
ADOR opex (regulatory)	1.19	1.19	1.19	3.57
ADOR capex (regulatory)	2.82	4.01	1.81	8.64
ADOR opex (statutory)	4.01	5.20	3.00	12.21

 Table 101
 Capitalisation of operating expenditure for ADOR program (\$million, 2023-24)

We are proposing to depreciate the above total Asset Delivery Organisational Review capitalised opex over a period of 15 years. This period will allow for the costs to be spread out over a longer duration, aligning with the expected lifespan and usefulness of this program.

We have accounted for this regulatory treatment as follows:

- \$2.8 million has been transferred from operating expenditure to the capital expenditure in the 2022-23 regulatory accounts; therefore, it is reflected in the opening RAB for 2023-24 in ESC's pricing model (specifically, it is included in the 2022-23 gross capex of \$342.4 million).
- \$2.8 million (book value) and 15 years (average asset life) is reflected in the ESC's pricing template (RollForward_FO tab), to ensure the regulatory depreciation is applied over the useful life of these capitalised amounts.
- \$4 million for 2023-24 and \$1.8 million for 2024-25 capitalised opex is reflected as forecast capital expenditure (split by the service: water, sewerage, and recycled water) in the ESC's pricing template (Capex FO input tab) with 15 years of useful asset life.

I.3 Impact of opex capitalisation on the revenue requirement

Table 102 below shows a comparison of the impact from capitalising operating expenditure related to IT/SaaS and Asset Delivery Organisational Review on the revenue requirement for the next regulatory period.

Our modelling indicates that if we do not capitalise the \$38.6 million of SaaS/IT opex for 2022-23 and \$8.6 million of Asset Delivery Organisational Review opex over the period 2022-23 to 2024-25, the revenue requirement for the next regulatory period will be lower by \$22.3 million to \$3,460.7 million. This is based on the assumption that we forgo the \$38.6 million (SaaS/IT) and \$2.8 million (ADOR) expenditure in 2022-23 – as they are removed off the base year as non-recurring items.

However, this method does not align the benefits to the customers (through efficiencies and better customer service experience) over the useful lives of the SaaS/IT project and ADOR program. This will result in a mismatch between the benefits gained and costs incurred over the project/program life. Capitalisation of these items will align the cost recovery of the program with the time period of the benefits, and thus provide better outcomes to our customers over the long-term.

	2024-25	2025-26	2026-27	2027-28	Total
Revenue requirement with capitalised opex (IT/SaaS and ADOR)	846.75	864.05	877.54	894.69	3,483.03
Revenue requirement without capitalised opex (IT/SaaS and ADOR)	841.14	858.41	871.96	889.18	3,460.70
Variance due to opex capitalisation	+5.61	+5.64	+5.57	+5.51	+22.33

Table 102 Comparison of the impact of opex capitalisation on revenue requirement (\$million, 2023-24)

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ⁱ Australian Institute of Aboriginal and Torres Strait Islander Studies, aiatsis.gov.au

ⁱⁱ Insync presentation, day 1 deliberative panel, slide 6

iii Valuation stage report

^{iv} Panel report, recommendation 3.3 page 15

^v GWW defines 'strong support' as panel members stating they 'liked' or 'loved' our responses to their recommendations. 24 of 27 panel members 'liked' or 'loved' our response.

vi Recall day report, p22-23

vii Insync and Mosaic Lab 2023, Customer Forum Summary Report, Page 11

viii Brimbank City Council letter to MD Maree Lang, 29 August 2023.

^{ix} This overspend has been calculated as the difference between controllable operating expenditure proposed in the 2018 Price Submissions and actual spend reported in the 2023 Price Submissions.

[×] Restructure of City West Water Corporation and Western Region Water Corporation Determination 2021 and Abolition of Western Region Water Corporation Determination 2021, both made by Richard Wynne, Acting Minister for Water on 28 February 2021 and published in the Victorian Government Gazette G10, 11 March 2021.

^{xi} Melbourne Metropolitan Water Tariff Review – Focus Group Report, February 2022, Insync ^{xii} Essential Services Commission 2022, 2024 Greater Western Water price review: Guidance paper, 20 September

xiii Essential Services Commission 2011, 2013 Water Price Review – Tariff Issues Paper, July 2011 p.26

^{xiv} Residential volumetric potable water step 2 will be relabelled 'Price step 2 (441+ litres/day)' in the new regulatory period. Step 3 will be removed.

^{xv} Full Federal Court's decision in Victoria Power Networks Pty Ltd v Commissioner of Taxation related to new customer contributions and developer gifted assets.

https://www.ato.gov.au/law/view/document?docid=LIT/ICD/VID237-240of2019/00001

 xvi We assume that our residential customer numbers grow at the same number annually as captured in VIF 2021 rather than the growth rate.

^{xvii} The ABS's Mesh Blocks are the smallest geographic areas defined by the ABS and form the building blocks for the larger regions of the Australian Statistical Geography Standard (ASGS). These are smaller than SA1 level data.

 $\ensuremath{^{xviii}}$ CWW and WW used the iSDP model for the past three price submissions.

^{xix} We identified an error in the WW 2018 determination listing recycled water usage as a residential charge. This scheduled fee applied to both residential and non-residential customers in the western region.

^{xx} The segments were created prior to the 2018 price submission using a statistical clustering method. The segments established using this method are then tested for relevance by calculating combined load and are finalised by identifying the customer types (ANZSIC codes) applicable to the segment.

^{xxi} Visit our website <u>www.gww.com.au</u> to view historical performance against our customer commitments

^{xxii} Essential Services Commission 2022, Outcomes Report 2021–22: Performance of Victoria's water businesses against their own commitments to customers, 18 October

^{xxiii} Western Water engaged with customers in its 2018 price submission to develop five customer outcomes that reflected customer values. Through its 2020 price submission Western Water engaged customers again to test if the customer outcomes proposed in 2018 remained relevant. Overall, Western Water's broad customer outcomes remained the same since 2018, however the measures underpinning each outcomes changed in 2020. For the purpose of this report we will refer to all measures reported in 2018-2024.

^{xxiv} The interval band represents approximately one third of businesses (5 businesses) centred around the state average. Scoring above the band is interpreted as scoring in the top third (top 5), and scores below the band represents scoring in the bottom third (bottom 5) of businesses for that period.

^{xxv} This overspend has been calculated as the difference between controllable operating expenditure proposed in the 2018 Price Submissions and actual spend reported in the 2023 Price Submissions.

^{xxvi} Restructure of City West Water Corporation and Western Region Water Corporation Determination 2021 and Abolition of Western Region Water Corporation Determination 2021, both made by Richard Wynne, Acting Minister for Water on 28 February 2021 and published in the Victorian Government Gazette G10, 11 March 2021.

^{xxvii} Schneider Electric (2022). *Electricity Price Forecast Covering FY2023-2028 Base case,* 23 March.

^{xxviii} Schneider Electric (2023). *Update to the Victorian Electricity 5-Year forecast*, 15 March. ^{xxix} Large market sites are those that consume more than 160 MWh per year, medium market sites are those that consume between 40 and 160 MWh per year, and small sites are those using less than 40 MWh per year.

xxx Essential Services Commission 2009. Water Industry Regulatory Accounting Code, Issue 4.