# ESSENTIAL SERVICES COMMISSION 



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## Summary

## We have made a final decision on the maximum prices Melbourne Water may charge for a five-year period starting 1 July 2021

In November 2020, Melbourne Water provided a submission to us proposing prices for a five-year period starting 1 July 2021. On 25 March 2021, we released our draft decision on Melbourne Water's price submission. ${ }^{1}$ The draft decision set out our preliminary views on Melbourne Water's proposals and invited interested parties to make further submissions.

In addition to a response from Melbourne Water, we received 11 submissions on our draft decision, which are listed at Appendix A and available on our website. We also held a public forum on 22 April 2021 to provide stakeholders an opportunity to explore issues with us and Melbourne Water.

After considering all feedback, we have made a price determination for Melbourne Water. ${ }^{2}$ The price determination sets out the maximum prices Melbourne Water may charge for prescribed services (or the manner in which its prices are to be calculated, determined, or otherwise regulated) for a five-year period from 1 July 2021 (2021-26). This final decision paper sets out our supporting reasons and analysis for the price determination.

Where our final decision on a particular aspect is unchanged from our draft decision, we have not detailed the supporting reasons in our final decision. Rather, we have noted that our final decision accepts the reasons and position we reached in the draft decision.

Where we have reached a different decision to that proposed in our draft decision, or where new information required our consideration, we have set out our reasons in full in this final decision. This final decision should be read in conjunction with our draft decision.

[^0]
## Melbourne Water provides key services across Melbourne and surrounds

Melbourne Water provides wholesale water supply and sewage services to retail water corporations that we also regulate. These include Melbourne metropolitan water retailers City West Water, South East Water and Yarra Valley Water, and regional water corporations Western Water, Barwon Water, South Gippsland Water and Westernport Water. ${ }^{3}$ Melbourne Water also provides waterways and drainage services direct to end-use customers in and around Melbourne.

This price review confirms the maximum prices customers pay for these services. Almost 2.4 million water customers are ultimately charged these prices, which are passed on through the retail water corporations which collectively serve about 5.6 million Victorians.

## We reviewed Melbourne Water's prices under our PREMO pricing framework

We reviewed Melbourne Water's price submission for the first time under our PREMO water pricing approach, which includes incentives for water corporations to deliver outcomes most valued by customers. ${ }^{4}$ We assessed Melbourne Water's price submission against the requirements set out in the Water Industry Regulatory Order 2014, the Essential Services Commission Act 2001, the Water Industry Act 1994 and the guidance we provided Melbourne Water in November 2019 and August 2020. We have obtained advice from expert consultants where appropriate.

## Our draft decision and Melbourne Water's response

Our draft decision proposed to accept many elements of Melbourne Water's price submission, including tariff structures and its price cap form of price control. However, we did not consider the submission provided sufficient information and evidence to support several key elements of Melbourne Water's proposals, including operating and capital expenditure forecasts, population growth and demand forecasts, and the length of regulatory period.

Our draft decision:

- Rated Melbourne Water's price submission as 'Standard' under our PREMO framework, compared to the 'Advanced' proposed by Melbourne Water.
- Proposed to not accept Melbourne Water's forecast revenue requirement, due to our proposed adjustments to benchmarks including expenditure and demand.

[^1]- Proposed to approve a three-year regulatory period, compared to the five proposed by Melbourne Water, in part reflecting uncertainty about demand and the impacts of the coronavirus pandemic.

In its response to our draft decision, Melbourne Water accepted some elements of our draft decision, including a number of our proposals relating to capital expenditure, operating expenditure, and capitalisation of its desalination payments.

It also updated some other key forecasts including lower forecasts for water and sewerage demand. Melbourne Water also requested that we remove the capital smoothing approach it adopted in its price submission and accepted in our draft decision.

Melbourne Water disagreed with our PREMO rating of 'Standard' for its price submission and requested that we reconsider our rating across all PREMO elements. Melbourne Water also did not accept our proposal for a three-year regulatory period and sought a five-year period.

Other stakeholders also made submissions in response to our draft decision. We have considered all feedback in making our final decision. ${ }^{5}$

## Our final decision results in a reduction to the revenue requirement and (generally) lower prices compared to our draft decision and Melbourne Water's price submission

In summary, our final decision:

- Approves maximum prices for a five-year period from 1 July 2021.

In accepting Melbourne Water's proposal for a five-year regulatory period, we had regard to Melbourne Water's acceptance of our draft decision to lower forecast capital expenditure and demand. We consider this leads to a more appropriate allocation of risk between Melbourne Water and its customers. We also note that metropolitan water retailers also provided feedback that they consider a regulatory period of five years would allow them more time to engage in Melbourne Water's next price review.

- Establishes a revenue requirement of $\$ 7,935.8$ million, which is $\$ 150.9$ million or 1.9 per cent lower than our draft decision.

The main reason for the lower revenue requirement is due to our inflation forecast being updated to reflect latest market data, using the methodology we have used at past price reviews and for the

[^2]Melbourne Water price review (we have not changed our methodology). ${ }^{6}$ We note the inflation forecast adopted in our final decision is close to those set by other regulators in their recent decisions. ${ }^{7}$ The lower revenue requirement results in (generally) lower prices for customers compared to our draft decision.

- Rates Melbourne Water's price submission as 'Standard' under PREMO.

As noted above, in its response to our draft decision, Melbourne Water contended that its approach was in line with an 'Advanced' rating and requested we amend our PREMO assessment of its price submission. Specifically, Melbourne Water disagreed with our application of the PREMO assessment framework, and with our ratings and supporting statements.

Having considered Melbourne Water's reasons, our final decision confirms our earlier draft decision to rate Melbourne Water's price submission as 'Standard' overall and 'Standard' for each of the four PREMO elements.

Our view is that the outcomes Melbourne Water committed to in its price submission would result in Melburnians receiving high quality drinking water, safe treatment and disposal of sewage, and new investment in waterways and drainage. While aspects of Melbourne Water's proposal demonstrated good processes and commitments, which should result in good outcomes for its customers, we also had concerns about specific aspects of its price submission that were relevant to our overall assessment, including:

- its response to increased uncertainty for demand and capital expenditure forecasting in light of the pandemic
- the degree to which its price submission reflected the influence of stakeholders through the customer engagement program
- inconsistencies between the written submission and the financial model, and compliance with our guidance in some areas
- a lack of demonstration of a significant improvement in customer value.

After undertaking a holistic assessment of Melbourne Water's submission, we are not satisfied that Melbourne Water had challenged itself to deliver a step change in value in the way we expect to

[^3]see in an 'Advanced' rated submission. The final decision ratings for each element of PREMO are set out in Table A.

Our final decision is to allow Melbourne Water a return on equity of 4.2 per cent, consistent with our PREMO rating. However, Melbourne Water is able to apply for a reinstatement of the full return on equity allowance for a 'Standard' price submission (that is, 4.5 per cent) during its regulatory period from 1 July 2021 if it can demonstrate that a reinstatement would be in the interests of customers, and if it can demonstrate it satisfies other considerations listed in the WIRO.

Our intention is to issue additional guidance closer to the time of any application by Melbourne Water. However, we envisage any application would be based on Melbourne Water exceeding its performance commitments within the regulatory period. More detail is provided in Chapter 13.

Our PREMO rating is an assessment of the water corporation's price submission. It is not an assessment of the water corporation itself.

Table A PREMO Rating

|  | Overall <br> PREMO <br> rating | Risk | Engagement | Management | Outcomes |
| :--- | :---: | :--- | :--- | :--- | :--- | :--- |
| Melbourne <br> Water's rating | Advanced | Advanced | Advanced | Advanced | Advanced |
| Commission's <br> rating | Standard | Standard | Standard | Standard | Standard |

Our reasoning on the various elements covered by our final decision is set out in Chapters 1 through 13 of this paper.

Our final decision allows Melbourne Water to deliver on its key obligations and services
Melburnians will continue to receive high quality drinking water, safe disposal and treatment of sewage, and new investment in waterways and drainage. Melbourne Water will continue to reduce
its environmental footprint and respond to climate change. Customers will benefit from almost $\$ 3.4$ billion of capital investment to maintain and improve services. ${ }^{8}$

The revenue requirement we have adopted in our final decision will allow Melbourne Water to deliver on its legislative and regulatory obligations, and its commitments to customers.

In terms of water and sewerage bill impacts, we estimate that our final decision translates to average bill reductions of around $\$ 20$ in 2021-22 for a typical residential household (owneroccupier) in metropolitan Melbourne, compared to current levels. Note this is indicative only and may vary as we are yet to confirm tariffs for retailers for 2021-22. Waterways and drainage charges will also remain relatively flat for the 2021-26 regulatory period.

## Our role and approach to water pricing

## We are Victoria's independent economic regulator

Our role in the water industry is based on the Water Industry Regulatory Order 2014 (WIRO) which is made under the Water Industry Act 1994 (WI Act) and sits within the broader context of the Essential Services Commission Act 2001 (ESC Act). Our role under the WIRO includes regulating the prices and monitoring service standards of the 19 water corporations operating in Victoria.

## We have reviewed the prices Melbourne Water proposes to charge customers from 1 July 2021

Our review of the prices proposed by Melbourne Water covers the prescribed services listed in the WIRO. ${ }^{9}$ The prescribed services include:

- storage operator and bulk water services
- bulk sewerage services
- bulk recycled water services
- metropolitan waterways and drainage services.

We have undertaken this review under our PREMO water pricing approach, which includes incentives for Melbourne Water to deliver outcomes its customers value the most.

## We assess prices against the WIRO and other legal requirements

Clause 11 of the WIRO specifies the mandatory factors we must have regard to when making a price determination, including matters set out in the WIRO, the WI Act and the ESC Act. In reaching this final decision we have had regard to each of the matters required by clause 11 of the WIRO, including the:

- Objectives and matters specified in clause 8 of the WIRO which include economic efficiency and viability matters, industry specific matters, customer matters, health, safety, environmental and social matters, and other matters which are specified in section 8 of the ESC Act and section 4C of the WI Act. We are also required to place emphasis on matters relating to efficiency set out in section 8A of the ESC Act.
- Matters specified in our guidance. ${ }^{10}$

[^4]- Principle that prices should be easily understood by customers and provide signals about the efficient costs of providing services, while avoiding price shocks where possible.
- Principle that prices should take into account the interests of customers of the regulated entity, including low income and vulnerable customers.

Appendix B lists the specific objectives and the various matters we must have regard to when making a price determination and provides a guide to where we have done so in this draft decision.

In November 2019, we issued a guidance paper to Melbourne Water to inform its price submission. We issued additional guidance in August 2020 to ensure the effects of the coronavirus pandemic were reflected in Melbourne Water's 2021 price submission. Our guidance sets out how we will assess Melbourne Water's submission against the matters we must consider under clause 11 of the WIRO.

If we consider the price submission has adequate regard for the matters in clause 11 of the WIRO and complies with our guidance, we must approve Melbourne Water's proposed prices. ${ }^{11}$

If we consider the submission does not have adequate regard for the matters specified in clause 11 of the WIRO or comply with our guidance, we may specify maximum prices, or the manner in which prices are to be calculated, determined or otherwise regulated. ${ }^{12}$

[^5]
## Our assessment of Melbourne Water's price submission

We have made our price determination for Melbourne Water after considering Melbourne Water's price submission and response to our draft decision, its responses to our queries, our consultants' reports and written submissions from interested parties (see Appendix A for a list of submissions).

Any reports, submissions, or correspondence provided to us which are material to our consideration of Melbourne Water's price submission and response to our draft decision are available on our website (to the extent the content is not confidential).

This final decision should be read with Melbourne Water's price submission and our draft decision.
Our guidance to Melbourne Water included a number of matters it must address in its price submission. ${ }^{13}$ During our assessment of Melbourne Water's price submission and its response to our draft decision, we and our consultants sought further information from Melbourne Water.

Our draft decision found Melbourne Water's price submission and the additional information it provided did not have adequate regard to the matters specified in clause 11 of the WIRO or comply with our guidance in areas including expenditure and demand forecasts.

In response, Melbourne Water accepted many elements of our draft decision including some proposals relating to expenditure and demand, and a lower desalination capitalisation amount. Melbourne Water did not accept our decision to rate its price submission as 'Standard' under our PREMO framework, or our proposal for a three-year regulatory period.

We reviewed Melbourne Water's response to our draft decision, including the additional information we requested through our review process, and stakeholder submissions on our draft decision. The commission provided Melbourne Water the opportunity to present to the commission on its response to our draft decision, which it did on 18 May 2021. We assessed Melbourne Water's proposals against the criteria in our guidance.

Melbourne Water's response addressed a number of matters raised in our draft decision on the prudency and efficiency of expenditure, demand forecasts, and uncertainty arising out of the coronavirus pandemic. Accordingly, our final decision accepts the five-year regulatory period proposed by Melbourne Water in its response to our draft decision (see chapter 1 for our reasoning).

[^6]However, on its PREMO rating, our final decision is that Melbourne Water's price submission reflects a 'Standard' rating. As set out in our draft decision and in our final decision, we could not see a significant increase in value to customers that reflects an 'Advanced' price submission. We consider Melbourne Water's price submission represents value to customers that reflects that of a ‘Standard' price submission. Our reasons are set out in chapter 13.

## 1. Regulatory period

We are required to set the term of the regulatory period for Melbourne Water's price determination. ${ }^{14}$

## Our draft decision

Our draft decision proposed to approve a regulatory period of three years. ${ }^{15}$ Our reasons included the uncertainty arising from the impact of the coronavirus pandemic and the flow-on risks associated with forecasts for key pricing variables such as demand and expenditure.

Melbourne Water's response to our draft decision
Melbourne Water's response to our draft decision proposed a five-year regulatory period for a range of reasons as set out in section 2.0 of its response to our draft decision. ${ }^{16}$ Among other things, Melbourne Water considered a shorter three-year period would impose significant additional costs on customers and Melbourne Water. It also considered we had not demonstrated a shorter period is the best response to pandemic related uncertainty. ${ }^{17}$

## Our final decision

Our final decision is to set a five-year regulatory period from 1 July 2021.
In forming this view, we considered Melbourne Water's acceptance of our draft decision to lower forecast capital expenditure and demand (refer to chapters 6 and 8). We consider this leads to a more appropriate allocation of risk between Melbourne Water and its customers.

We also agree with Melbourne Water's contention that there are benefits to a five-year period in terms of enabling retailers to input into Melbourne Water's price review process. A submission from the Water and Sewerage Customer Council suggested the shorter period might reduce the opportunity for its members (comprising water corporations that are customers of Melbourne

[^7]Water) to meaningfully contribute to Melbourne Water's future price submissions due to the timing of retailer and wholesaler price reviews. ${ }^{18}$

We note that our guidance to Melbourne Water set out a default regulatory period of five years because we considered a five-year regulatory period provides the following benefits:

- a relatively long period of certainty for customers about the outcomes to be delivered and prices to be charged
- sufficient time for Melbourne Water to focus on service delivery and for the incentive mechanisms within the pricing framework to be implemented.

Consumer Action Law Centre supported a three-year regulatory period due to uncertainty, and because a shorter period would provide greater flexibility to adjust prices as appropriate. ${ }^{19}$ As discussed above, we consider Melbourne Water's response to our draft decision adequately addresses the risks to customers associated with these uncertainties over a five-year period.

We also note that there are adjustment mechanisms provided for in Melbourne Water's determination for reconsideration of prices within the regulatory period under limited uncertain and unforeseen circumstances. The uncertain and unforeseen events mechanism accommodates uncertain and unforeseen impacts arising from the integration of City West Water and Western Water, including from changes to bulk entitlement arrangements.

Our determination also includes a mechanism that allows Melbourne Water to apply for an adjustment to the return on equity during the regulatory period. The review would consider an increase in the return on equity from the 4.2 per cent adopted in our final decision and determination to 4.5 per cent, which reflects the full return on equity allowance for a 'Standard' price submission. This would be based on an assessment of matters such as Melbourne Water's performance during the regulatory period so far. More details are set out in Chapter 13.

Final decision on regulatory period
We have set the term of Melbourne Water's regulatory period as five years.

[^8]
## 2. Customer engagement

The purpose of customer engagement is for Melbourne Water to clearly understand the priorities of customers, including the products and services its customers expect. This is to enable Melbourne Water to deliver outcomes that matter most to customers, as efficiently as possible.

## Our draft decision

In its price submission, Melbourne Water gave itself an 'Advanced' PREMO rating for Engagement and justified this on the reach of its engagement, the shift towards more collaboration with key stakeholders, the opportunities to provide feedback on meeting stakeholder expectations, and the level of influence customers had on its proposals. ${ }^{20}$

For our draft decision we assessed Melbourne Water's engagement based on its price submission, and the various supporting records we requested and received from Melbourne Water. We reviewed over 100 documents relating to Melbourne Water's engagement processes including meeting agendas, meeting minutes, stakeholder emails, consultants' reports on the outcomes of workshops, forums, deliberative processes and letters and reports from participants.

For the purposes of PREMO, we assessed Melbourne Water's Engagement rating against our guidance and the PREMO assessment tool. Our draft decision rated Melbourne Water's Engagement as 'Standard'.

## Melbourne Water's response to our draft decision

Melbourne Water's response to our draft decision contests our view that its engagement practices did not fully support the level of collaboration, influence and deliberation expected of an 'Advanced' submission and suggests that we had assessed them against other businesses rather than our assessment framework and guidelines. Melbourne Water also suggested that our draft decision assessment of its engagement as 'a more traditional approach' appeared to be based only on feedback received by Deloitte during its consultation with officers of retail water businesses. ${ }^{21}$

For more detail on Melbourne Water's views on our assessment of and PREMO rating for engagement, see pages 19 to 32 of its response to our draft decision.

[^9]
## Our final decision

We have considered all information provided by Melbourne Water (including in its response to our draft decision and responses to our information requests) and other stakeholders. This included detailed review of materials and records of Melbourne Water's various engagement activities, including its approach to the use of willingness to pay and SIMALTO (refer to Box 2.1). Our assessment was conducted according to our guidance and the PREMO Assessment Tool. This section is structured to demonstrate our assessment against the guiding questions.

Our final decision confirms a 'Standard' rating for the Engagement element of PREMO. On the information available to us, we found nothing that caused us to change our draft decision on Melbourne Water's Engagement rating.

We consider that Melbourne Water's engagement program was a significant improvement from its 2016 price review. We note that there was positive endorsement and recognition of Melbourne Water's engagement and the improvement on past engagement processes by the two customer councils established to test strategic ideas and provide advice on key issues.

We recognise that Melbourne Water has engaged with its broad stakeholder and customer base from early in the process.

Our review identified a wide variety of engagement methods adopted by Melbourne Water that were fit for purpose, in that they were well suited to the content and circumstances facing the business and its customers.

We recognise there were many elements in Melbourne Water's engagement processes around form, time and content that allowed for the examination of focused issues with key stakeholder groups. For example, Melbourne Water established deliberative processes in particular instances like determining its set of outcomes and refining performance measures. We saw evidence that it tested and retested some of its positions and proposals with end-use and retail customers. As stated in our guidance, these are examples of a 'Standard' submission.

To justify an 'Advanced' rating for engagement, our PREMO assessment tool provides a set of examples, that includes feedback from stakeholders that it has delivered on engagement commitments, as well as a strong alignment between what is proposed by Melbourne Water in its price submission and the preferences and interests elicited in the engagement program.

Our review found insufficient evidence of stakeholder influence on the final form of the matters that Melbourne Water had engaged with them on For example, we found insufficient evidence that Melbourne Water tested and retested with stakeholders its final proposals on its desalination capitalisation (which reduced its revenue requirement by around $\$ 180$ million), capital expenditure
levels (a 47 per cent increase on current levels) and guaranteed service levels (which Melbourne Water only fully developed after its price submission to us).

This was substantiated by stakeholders in their submissions on our draft decision. Three stakeholder submissions raised concerns on genuine influence and opportunities for engagement on significant matters like early involvement around the capital program ${ }^{22}$, lack of clarity in the process ${ }^{23}$ and options to better support affordability of bills. ${ }^{24}$

In a submission in response to our draft decision, the Water and Sewerage Customer Council state that 'council members were given a reasonable and fair opportunity to participate on the issues relevant to them but note the difference between participation and genuine influence. The process allowed for adequate time to raise issues.' The submission also noted 'we believe future engagement programs would benefit from early involvement in the strategies that inform capex decisions and greater involvement in trade-off analysis and in willingness to pay conversations.'

In a submission in response to our draft decision, the Urban Development Industry of Australia, Victoria Division states 'Whilst we welcomed the opportunity to participate, member feedback indicates that the process lacked clarity'. It also mentions on the engagement for waterways and drainage services 'we consider that the basis for a five per cent increase was unclear, despite further details being sought by our representative at the time'.

In response to our draft decision, the Consumer Action Law Centre (CALC) identified that it did not always receive a full explanation of the issues that would impact customer bills. It notes 'during the preparation of its pricing proposal, Melbourne Water told us that potential lower population growth means that there are less customers to distribute its costs across, and therefore there would be higher prices if it adopted reduced population forecasts based on COVID-19. Melbourne Water said that it would bear the revenue risk on behalf of customers should growth rates be below forecast'. CALC noted with concern, that Melbourne Water's later communication with the commission outlined that it would be 'unlikely to absorb, in full, the much higher revenue risk should growth be closer to the state forecasts of population'.

[^10]For an 'Advanced' rating, we would expect to see a closer alignment between what is proposed by Melbourne Water in its price submission and the preferences and interests elicited in the engagement program.

Furthermore, Melbourne Water's response to our draft decision affirming the quality and influence of its engagement is not consistent with the views of stakeholders. To achieve an 'Advanced' rating we would expect stakeholder views about the level of influence fully resolved and addressed between a water corporation and its stakeholders, and appropriately reflected in the price submission to us.

We issued Melbourne Water a request for information under our Act seeking documentation on feedback provided by a key customer group on Melbourne Water's engagement. ${ }^{25}$ We consider the information we obtained from Melbourne Water as a result of our request for information supports our final decision to adopt a 'Standard' rating for the Engagement element of PREMO.

## Willingness to pay study

Our draft decision noted that Melbourne Water relied heavily on customers' willingness to pay for additional expenditure on waterways and drainage services. We considered that the findings from Melbourne Water's willingness to pay study were not sufficient to support the additional expenditure and we requested Melbourne Water to provide further justification through business cases. ${ }^{26}$ Our assessment of the prudency and efficiency of the additional expenditure is detailed in Chapter 6.

Our draft decision also raised several concerns about the SImultaneous Multi-Atribute Trade Off (SIMALTO) method adopted by Melbourne Water to estimate customers' willingness to pay for increased expenditure for in waterways and drainage services.

Melbourne Water's response to our draft decision did not agree with our concerns about the SIMALTO method (see section 3.1 of its response to our draft decision). We reviewed Melbourne Water's response to our draft decision and sought advice from an expert consultant, which is published on our website. ${ }^{27}$ The outcomes of our review are summarised in Box 2.1 (with more detail on our views on SIMALTO provided at Appendix C of our draft decision).

[^11]
## Box 2.1 Summary of our SIMALTO assessment

The matters discussed below focus on Melbourne Water's comments in response to our draft decision and should be read in conjunction with our analysis of SIMALTO in our draft decision.

Our assessment confirms our view that SIMALTO does not have a theoretical basis for use in customer willingness to pay studies. It differs from many forms of stated preference techniques that have been adopted in real world setting and have a strong theoretical underpinning. This differs from Melbourne Water's claim in its response to our draft decision. ${ }^{28}$

Melbourne Water also states that it has followed the industry principles for willingness to pay studies that are outlined in a Water Services Association of Australia guideline.

We note these principles are broad and should be applied to ensure a well-designed study. However, the guideline does not comment on the type of willingness to pay methodology to use. Therefore, even though meeting the principles indicates good practice, it does not address our concern on the validity of using SIMALTO to test customer willingness to pay.

Our draft decision noted we considered the SIMALTO technique used by Melbourne Water was not transparent and 'black box' in nature. We advised Melbourne Water before our draft decision that it had not provided the unlocked SIMALTO model (that would support transparency) for to us to review for our draft decision. ${ }^{29}$

In response to a further request following our draft decision, Melbourne Water provided an unlocked model to us in late May 2021. The information provided by Melbourne Water enabled us to understand the process undertaken to produce the willingness to pay outcome.

Our review of the model found that the willingness to pay output obtained from the model was not likely to reflect a true willingness to pay made by respondents in the survey due to several reasons identified and outlined in our consultant's report. ${ }^{30}$

Melbourne Water also noted in its response to our draft decision that our 2016 final decision accepted its use of SIMALTO. Our assessment of Melbourne Water's 2016 price review found

[^12]that SIMALTO was used to examine preferences to demonstrate the trade-offs between service levels, which we still consider is an appropriate use of SIMALTO.

## Feedback from stakeholders

In a submission responding to our draft decision, Newgate Research (engaged by Melbourne Water to undertake a study into customers' preferences and willingness to pay for waterways and drainage investment using SIMALTO) shares some of the views outlined in our draft decision. ${ }^{31}$ However, it did not agree with our concerns about using SIMALTO for estimating customers' willingness to pay. Our consultant reviewed Newgate Research's response and considered our concerns about the use of SIMALTO for willingness to pay studies remain valid. ${ }^{32}$

The Consumer Action Law Centre raised a general concern about using willingness to pay for the purpose of price setting. It noted that willingness to pay studies are more effective when used in the context of more familiar goods such as the car industry and is not the best approach for capturing customers' preferences for waterways and drainage services. ${ }^{33}$

VicWater raised concerns about the implication of our criticism of SIMALTO on its use to justify projects across the water sector. VicWater noted that questioning the validity of SIMALTO can leave water corporations uncertain about how to effectively test communities' support. As outlined above and in our consultant's report, we consider SIMALTO is not a valid tool for estimating customers' willingness to pay, and willingness to pay studies should not be used as a standalone justification for the prudency and efficiency of forecast expenditure.

## Our assessment against the PREMO framework

As noted above, in its response to our draft decision Melbourne Water suggested that we had assessed it against other businesses rather than our assessment framework and guidelines. This is not correct. We assessed Melbourne Water against the principles in our guidance, and the PREMO assessment tool. This is the same approach we have taken to past price reviews.

[^13]
## The materials we relied on

In its submission, Melbourne Water stated its understanding that our draft decision assessment of its engagement as 'a more traditional approach' was based on feedback received by Deloitte from retailers alone. This is not correct. As noted earlier, our review process included consideration of the entirety of the material Melbourne Water submitted to us as part of the review process, which included detailed review of materials and records of its various engagement activities. As such, the substance of our engagement assessment was not limited to Deloitte's expenditure review.

## IAP2 award

Melbourne Water's response to our draft decision sought greater consideration of its efforts on engagement. It noted elements of its engagement program had been recognised beyond the water industry and regulatory environment, and that it had received the IAP2 Core Values Australasian 'Organisation of the Year' Award in 2020. We acknowledge this achievement.

As noted earlier, we assessed Melbourne Water's engagement against the principles in our guidance and the PREMO assessment tool. Our assessment and conclusions reflect our views on Melbourne Water's engagement in relation to its price submission and proposed PREMO rating, and are not an assessment of Melbourne Water's overall engagement approach or capability.

Our assessment identified Melbourne Water had not met the expectations of 'Advanced' engagement against the PREMO framework. This is consistent with feedback from a range of sources that participated in the engagement activities designed for the development of its pricing submission.

## Addressing the interests of low income and vulnerable customers

Our draft decision found that Melbourne Water met the WIRO requirement to take into account the interests of low income and vulnerable customers, including their affordability concerns, through its engagement and proposals. We considered that Melbourne Water demonstrated it genuinely engaged with various customer groups who were more likely to experience affordability issues, to understand the impact of its proposed prices. Melbourne Water also evidenced that affordability concerns were considered in its specific proposals.

We received four submissions in response to our draft decision on affordability. ${ }^{34}$ We note many end-use customers experienced vulnerability for the first time due to the coronavirus pandemic and

[^14]therefore have heightened concerns about affordability. When making this final decision, we have considered the interests of consumers, including low income and vulnerable customers. We consider that our final decision, which results in a further reduction in prices compared to our draft decision, combined with the commitments by Melbourne Water, are in the interests of consumers, including low income and vulnerable customers.

We are satisfied Melbourne Water's overall engagement and proposals meets the requirement of the WIRO to take into account the interests of low income and vulnerable customers.

## 3. Outcomes

The outcomes Melbourne Water proposes over the regulatory period starting 1 July 2021 are: ${ }^{35}$

- access to safe and reliable water and sewerage services
- Melbourne's environment, rivers, creeks, and bays are protected, and Melbourne Water's greenhouse gas emissions are minimised
- Melbourne remains liveable as it deals with the impacts of climate change and population growth
- Melburnians are empowered to support the design and delivery of service outcomes
- easy, respectful, responsive, and transparent customer service
- bills are kept as low as possible.

Melbourne Water's proposed measures and targets that it will use to report on the performance for each outcome are detailed on pages 14 to 15 in its price submission.

Melbourne Water's outcomes were informed by its engagement and we noted in our draft decision that it demonstrated customer agreement for the majority of its proposed measures and targets. It has also committed to reporting annually to customers on how it has delivered on its outcomes, both directly to a representative customer forum and on its website.

## Our draft decision

Our draft decision considered Melbourne Water's outcomes proposal is consistent with a 'Standard' PREMO rating. We considered Melbourne Water's price submission did not demonstrate a significant improvement in customer value.

## Melbourne Water's response to our draft decision

Melbourne Water's response to our draft decision stated it has concerns with:

- the view that Melbourne Water had not challenged itself enough to deliver significant improvement to customers
- comparison with retail water company targets and performance reporting
- Melbourne Water's approach to guaranteed service levels.

Our draft decision noted that most of Melbourne Water's targets are set to maintain current service levels. In response Melbourne Water stated that it is unclear why it would be expected to set higher

[^15]targets and more challenging threshold limits, when this was not requested by customers. It asserted that such targets would impose additional cost to deliver a service level that is higher than what customers want, resulting in a loss of customer value. ${ }^{36}$

Under PREMO, water corporations are rewarded with a higher return on equity if they can demonstrate significant improvements in customer value in areas customers value most. The onus to deliver better value lies with the water corporation. This could mean delivering more for less where service levels remain the same, for example.

Melbourne Water asserted that we were critical of it for not outlining a plan to address underperformance where it has fallen short on its commitments to customers and contested our comparison with retailer targets and performance reporting. ${ }^{37}$ We outlined in our guidance that Melbourne Water's proposed PREMO rating may be supported if it provided information about how it would respond to underperformance. ${ }^{38}$ Our draft decision noted that Melbourne Water did not do this and rather than making comparisons with retailers we provided illustrative examples of industry best practice.

Melbourne Water contended that its plan to introduce a guaranteed service level scheme is an approach to compensating customers for underperformance. ${ }^{39}$ However, guaranteed service level schemes are designed to address shortfalls in specified service levels for those customers who receive a lower level of service (as discussed in the next section). Melbourne Water provided no further information on how it would address a shortfall in delivering its outcome commitments to customers.

While our draft decision acknowledged Melbourne Water's plan to introduce guaranteed service levels, and we agree this is a step up for Melbourne Water, we do not consider this approach is above current industry standards and therefore does not reflect an 'Advanced' PREMO rating.

We also consider Melbourne Water did not accurately represent other water corporations' level of ambition in its comparison of outcome measures and targets between itself and other water corporations that received an 'Advanced' or higher PREMO rating. ${ }^{40}$ The PREMO rating for Outcomes is not solely linked to the level of ambition in a set of measures and targets, so it is inaccurate to compare the level of ambition in this way. Rather, the Outcome rating should reflect the overall ambition in the entire price submission and the value proposition made to customers

[^16](we discuss this further in Chapter 13 - Outcomes). For example, in Goulburn Valley Water's 2018 price submission, it proposed prices that equated to a fall in its typical bill for residential customers of around $\$ 90$ over its five-year regulatory period. This reflected Goulburn Valley Water's commitment to continue to improve the efficiency of its operations to deliver the lowest prices it can to its customers and in our view justified its 'Leading' PREMO rating. ${ }^{41}$

## Our final decision

Melbourne Water did not provide any new evidence to demonstrate delivery of significantly improved customer value and we received no additional submissions in response to our draft decision that cause us to change our view on Melbourne Water's proposed outcomes and associated PREMO rating.

We are currently engaging with Melbourne Water to ensure its final set of measures and targets meet the requirements set out in our guidance, namely they are clearly defined, unambiguous, have clear annual performance targets, and reflect successful delivery of the stated customer outcome. When we are satisfied they meet our guidance requirements, we will ask Melbourne Water to publish its final outcome commitments, and we will also publish these on our website.

Melbourne Water's performance against these published measures and targets will allow it to demonstrate through its annual reporting whether its customers received the value they paid for. It will also inform the rating for the Performance element of PREMO at the next price review.

As part of its outcomes reporting, we require Melbourne Water to report on the outcomes delivered due to the uplift in waterways and drainage operating expenditure. We expect Melbourne Water will report to the Waterways and Drainage Customer Council on the outcomes associated with the uplift in expenditure given the Council's interest in this area (Chapter 5 discusses this further).

In future reviews, we consider Melbourne Water should engage with a more representative group of end-use customers to get community views and expectations about waterways and drainage services and prices. We note that the current makeup of the Waterways and Drainage Council balances towards interested stakeholder groups, who are not entirely independent of Melbourne Water in that some receive grants from or are investment partners with Melbourne Water. Nonetheless, we acknowledge that stakeholder groups involved in the current Waterways and Drainage Customer Council can provide valuable input into decisions about waterways and drainage investments.

[^17]
## Outcomes

### 3.1. Guaranteed service levels

Guaranteed service level schemes (GSL) define a water corporation's commitment to deliver a specified level of service. For each GSL, a water corporation commits to a payment or a rebate on bills to those who have received a level of service below the guaranteed level.

Our guidance did not specifically require Melbourne Water to establish a GSL scheme, and we recognise this initiative arises from its customers' expectations.

## Our draft decision

We provided an overview of Melbourne Water's proposal and we noted Melbourne Water's stated intention to introduce GSLs in the next regulatory period (2021-2026), and that elements of the scheme were yet to be finalised.

## Melbourne Water's response to our draft decision and our final decision

Melbourne Water submitted further detail on the GSL scheme it intends to implement from 1 July 2021. Notably Melbourne Water submitted to us a separate set of GSLs for each of the three metropolitan retailers - Yarra Valley Water, South East Water and Greater Western Water (noting City West Water and Western Water are separate corporations until 30 June 2021). We have subsequently confirmed with each of these businesses that they were consulted and support these respective GSL targets and payments. As such, we accept the set of GSLs as submitted in Melbourne Water's response to our draft decision.

Melbourne Water's GSLs are set out in Appendix C of this final decision.
As with other GSL schemes, it is the responsibility of the water corporation to identify and apply the GSL as soon as practicable after a customer entitlement to the GSL rebate arises.

Melbourne Water will be required to report to us on the number of GSL rebates it applies and the value of these, through our annual performance reporting process. We also encourage Melbourne Water to report back to stakeholders on the GSL rebates as it seeks to evolve its program.

## 4. Revenue requirement

Melbourne Water's revenue requirement is the forecast amount it needs to deliver on customer outcomes, government policy, and obligations monitored by technical regulators including the Environment Protection Authority Victoria and the Department of Health. Along with forecast demand, it is an input to calculating prices. ${ }^{42}$

## Our draft decision

Our draft decision adopted a revenue requirement of $\$ 4,785.4$ million over a three-year period starting 1 July 2021. As noted earlier, our final decision approves a five-year pricing period from 1 July 2021, different to the three years approved in our draft decision.

However, our draft decision included a forecast revenue requirement (and forecasts for its key components) over five years. We have compared our final decision revenue requirement (and other forecasts) to these five-year estimates to show key changes since our draft decision.

## Our final decision

Our draft decision indicated a revenue requirement of $\$ 8,086.7$ million over a five-year period from 1 July 2021.43 Our final decision approves a revenue requirement of $\$ 7,935.8$ million, which is 1.9 per cent or $\$ 150.9$ million lower. This reflects our final decision on each element of the revenue requirement, as set out in Table 4.1.

The decrease is mainly due to our final decision adjustment to forecast inflation. The decrease was partly offset by an increase in benchmarks adopted for:

- expenditure due to our final decision adjustments
- regulatory depreciation due to Melbourne Water's request that we remove the capital smoothing mechanism it had proposed in its price submission.

Adjustments to the revenue requirement since our draft decision are set out at Table 4.2, with the reasons explained in the following sections.

[^18]
## Final decision on revenue requirement

Our final decision on Melbourne Water's revenue requirement is $\$ 7,935.8$ million over a fiveyear period starting 1 July 2021.

Table 4.1 Final decision on Melbourne Water's revenue requirement
\$ million 2020-21

|  | 2021-22 | 2022-23 | 2023-24 | 2024-25 | 2025-26 | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Operating expenditure | 946.9 | 936.1 | 925.4 | 913.7 | 904.7 | $\mathbf{4 , 6 2 6 . 8}$ |
| Return on assets | 384.2 | 401.3 | 416.3 | 426.7 | 434.3 | $\mathbf{2 , 0 6 2 . 9}$ |
| Regulatory depreciation | 191.3 | 212.6 | 234.5 | 250.9 | 265.0 | $\mathbf{1 , 1 5 4 . 4}$ |
| Tax liability | 17.8 | 18.8 | 19.2 | 17.1 | 18.9 | $\mathbf{9 1 . 7}$ |
| Final decision revenue <br> requirement | $\mathbf{1 , 5 4 0 . 2}$ | $\mathbf{1 , 5 6 8 . 8}$ | $\mathbf{1 , 5 9 5 . 4}$ | $\mathbf{1 , 6 0 8 . 4}$ | $\mathbf{1 , 6 2 3 . 0}$ | $\mathbf{7 , 9 3 5 . 8}$ |

Note: numbers have been rounded

## Table 4.2 Adjustments to draft decision revenue requirement

\$ million 2020-21

|  | 2021-22 | $\mathbf{2 0 2 2 - 2 3}$ | $\mathbf{2 0 2 3 - 2 4}$ | $\mathbf{2 0 2 4 - 2 5}$ | $\mathbf{2 0 2 5 - 2 6}$ | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Draft decision revenue <br> requirement |  |  |  |  |  |  |
| - Operating expenditure | $\mathbf{1 , 5 7 2 . 0}$ | $\mathbf{1 , 5 9 4 . 3}$ | $\mathbf{1 , 6 1 9 . 0}$ | $\mathbf{1 , 6 3 8 . 5}$ | $\mathbf{1 , 6 6 2 . 8}$ | $\mathbf{8 , 0 8 6 . 7}$ |
| - Return on assets | 8.1 | 7.6 | 7.7 | 7.4 | 7.9 | $\mathbf{3 8 . 8}$ |
| - Regulatory depreciation | -36.1 | -37.8 | -39.5 | -40.7 | -41.6 | $\mathbf{- 1 9 5 . 7}$ |
| - Tax allowance | 1.9 | 9.0 | 11.9 | 7.7 | -0.6 | $\mathbf{2 9 . 9}$ |
| Total adjustments | -5.7 | -4.4 | -3.8 | -4.4 | -5.6 | $\mathbf{- 2 3 . 9}$ |
| Final decision revenue <br> requirement | $\mathbf{- 3 1 . 8}$ | -25.6 | -23.7 | -30.1 | -39.8 | $\mathbf{- 1 5 0 . 9}$ |

Note: numbers have been rounded

[^19]
### 4.1. Tax allowance

## Our draft decision

Our draft decision on the tax allowance differed from Melbourne Water's initial proposal due to our proposed adjustments to its forecast expenditure and return on assets.

## Melbourne Water's response to our draft decision

Melbourne Water recalculated the tax allowance consistently with the requirements of our guidance. ${ }^{45}$ No other new considerations were presented in submissions received following the draft decision which caused us to change our views on the tax allowance.

## Our final decision

Compared to our draft decision, we have updated the tax allowance to reflect our final decision on the revenue requirement. These updates follow the methodology set out in our guidance.

## Final decision on tax allowance

The commission's final decision on tax allowance is shown in Table 4.1.

### 4.2. Regulatory depreciation

Regulatory depreciation is an input to calculating the regulatory asset base and the revenue requirement. Regulatory depreciation allows a water corporation to recover the cost of investing in assets over their estimated life.

## Our draft decision

Our draft decision on regulatory depreciation differed from Melbourne Water's proposal due to our proposed adjustments to capital expenditure. We required Melbourne Water to recalculate regulatory depreciation based on its assessment of our draft decision adjustments.

## Melbourne Water's response to our draft decision

Melbourne Water requested that we remove the 'capital smoothing adjustments', which it had proposed in its price submission. ${ }^{46}$ This change has been adopted in our final decision which has an upward impact on forecast depreciation.

[^20]Following receipt of its response to our draft decision, we informed Melbourne Water that it had not correctly applied our draft decision adjustments to capital expenditure in the financial model. Following our request to apply the adjustments in the correct manner, Melbourne Water discovered and corrected a minor error that originally overstated regulatory depreciation by $\$ 0.5$ million.

Other than the above adjustments, Melbourne Water recalculated its regulatory depreciation in line with the method required by our guidance. ${ }^{47}$ No new considerations were presented in submissions received following the draft decision which caused us to change our views on regulatory depreciation.

## Our final decision

Compared to our draft decision, we have updated regulated depreciation to reflect our final decision on capital expenditure. The update follows the methodology set out in our guidance.

Final decision on regulatory depreciation
The commission's final decision on regulatory depreciation is shown in Table 4.1.

## 5. Operating expenditure

Melbourne Water recovers operating expenditure through tariffs charged directly to end-use customers (waterways and drainage) and to the retail water corporations (bulk water and sewerage services). Operating expenditure relates to recurrent costs that can usually be allocated to a single year and generally comprises the majority of Melbourne Water's revenue requirement, so it is a key element for our review. Details of Melbourne Water's forecast operating expenditure is on pages 6-1 to 6-23 of the price submission.

## Our draft decision

Our draft decision proposed a total operating expenditure of $\$ 2,785.0$ million for a three-year regulatory period 2021-24 (or $\$ 4,588.0$ million over the five-year 2021-26 period). This was $\$ 82$ million higher than Melbourne Water's submission over the three-year 2021-24 period (or $\$ 133.6$ million higher over the five-year 2021-26 period). The key differences from Melbourne Water's proposal include:

- Decreasing controllable operating expenditure by $\$ 23.6$ million over the 2021-24 period (or $\$ 41.8$ million over the five-year 2021-26 period) - reflecting adjustments to ensure expenditure is efficient and prudent based on an expenditure review by our consultant, Deloitte Access Economics.
- Increasing non-controllable operating expenditure by $\$ 105.5$ million over the 2021-24 period (or $\$ 175.5$ million over the five-year 2021-26 period) - reflecting adjustments to the capitalisation of desalination plant payments.

Our draft decision also set out the approach we take to assessing and establishing an allowance for operating expenditure. ${ }^{48}$ While our review looks at the business areas separately, the benchmark operating expenditure that we propose to adopt for Melbourne Water does not represent the amount that Melbourne Water is required to spend or allocate to particular operational, maintenance and administrative activities. Nor does it preclude Melbourne Water from undertaking any proposed activities or obligations. Rather, it represents assumptions about the overall level of operating expenditure (to be recovered through prices) that we consider sufficient to operate the business efficiently and to maintain services over the regulatory period.

[^21]
## Our final decision

Table 5.1 sets out our final decision on Melbourne Water's operating expenditure, for the purpose of establishing the revenue requirement. We consider our proposed operating expenditure in this final decision reflects the expenditure a prudent service provider would incur when acting efficiently to achieve the lowest cost in delivering the outcomes specified in Melbourne Water's price submission. As part of its engagement to provide expert advice informing our assessment of controllable operating expenditure, Deloitte reviewed Melbourne Water's response to our draft decision and the associated supporting material. Deloitte's review of this information and its recommendations are available on our website. ${ }^{49}$

## Table 5.1 Final decision - operating expenditure

\$ million 2020-21

|  | 2021-22 | 2022-23 | 2023-24 | 2024-25 | 2025-26 | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Controllable costs | 384.8 | 381.5 | 383.1 | 387.3 | 391.0 | $\mathbf{1 , 9 2 7 . 7}$ |
| Non-controllable costs | 562.1 | 554.6 | 542.3 | 526.3 | 513.8 | $\mathbf{2 , 6 9 9 . 1}$ |
| - Desalination payments | 527.6 | 519.8 | 507.6 | 491.6 | 478.4 | $\mathbf{2 , 5 2 5 . 0}$ |
| - Environment contribution | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | $\mathbf{4 . 5}$ |
| - Licence fees - ESC | 1.1 | 1.1 | 1.1 | 1.1 | 1.7 | $\mathbf{6 . 3}$ |
| - Licence fees - DH | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | $\mathbf{1 . 2}$ |
| - Licence fees - EPA | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | $\mathbf{6 . 7}$ |
| - Other | 30.8 | 31.1 | 31.1 | 31.1 | 31.2 | $\mathbf{1 5 5 . 3}$ |
| Final decision <br> expenditure | $\mathbf{9 4 6 . 9}$ | $\mathbf{9 3 6 . 1}$ | $\mathbf{9 2 5 . 4}$ | $\mathbf{9 1 3 . 7}$ | $\mathbf{9 0 4 . 7}$ | $\mathbf{4 , 6 2 6 . 8}$ |

Note: numbers have been rounded
The Environmental Contribution collects funds from water corporations under the WI Act; Licence fees are paid to cover costs incurred by Department of Health (DH), Environment Protection Authority Victoria (EPA), and the Essential Services Commission (ESC) in their regulatory activities related to the water corporation.

## Final decision on operating expenditure

Our final decision is to:

[^22]- Reduce Melbourne Water's proposed benchmark controllable operating expenditure by $\$ 21.7$ million to $\$ 1,927.7$ million over the five-year regulatory period.
- Increase Melbourne Water's proposed non-controllable operating expenditure by $\$ 194.1$ million to $\$ 2,699.1$ million over the five-year regulatory period.
- Approve a total benchmark operating expenditure of $\$ 4,626.8$ million over the five-year regulatory period.


### 5.1. Controllable operating expenditure

## Our draft decision

Our draft decision to reduce benchmark controllable operating expenditure by $\$ 23.6$ million over the 2021-24 period (or $\$ 41.8$ million) because we: ${ }^{50}$

- Reduced baseline controllable operating expenditure by $\$ 2.4$ million, leading to a $\$ 12.1$ million reduction in expenditure over the 2021-26 period.
- Did not accept Melbourne Water's proposed controllable operating expenditure growth rate of 1.95 per cent. In order to make a draft decision we adopted a provisional rate of one per cent per year based on more recent population growth forecasts, and required Melbourne Water to update this estimate.
- Similarly adopted a provisional efficiency improvement rate of 1.2 per cent a year (to deliver an annual net efficiency rate of 0.2 per cent), with an expectation that Melbourne Water would also need to review and update this rate in response to our draft decision.
- Reduced Melbourne Water's adjustments for waterways and drainage operating expenditure above baseline by $\$ 22$ million (or $\$ 4.4$ million a year) for the 2021-26 period. We invited Melbourne Water to provide additional business cases supporting the expenditure not accepted.

Our draft decision also requested Melbourne Water to provide further explanation and information to assist our assessment of its electricity costs forecasts.

## Melbourne Water's response and submissions to our draft decision

Melbourne Water's response largely accepts the adjustments made in our draft decision to operating expenditure, with two exceptions seeking the reinstatement of:

- $\$ 0.8$ million to baseline expenditure relating an accounting adjustment for the historical Biosolids Reuse Innovation Project

[^23]- $\$ 21.2$ million of waterways and drainage uplift expenditure (of the $\$ 22$ million removed). ${ }^{51}$

We also note that Melbourne Water's response reduces the electricity cost allowance to account for revised network costs, reduced consumption forecasts (based on new demand growth estimates) and delaying the Cement Creek Diversion project. The cumulative impact of these adjustments reduces operating expenditure by $\$ 5.05$ million over the 2021-26 regulatory period. ${ }^{52}$

A number of submissions to our draft decision commented on the operating expenditure allowance, with particular focus on waterways and drainage expenditure. The Yarra Riverkeeper reiterates the points in its earlier submission on Melbourne Water's price submission, arguing that the uplift in operating expenditure is modest and will deliver benefits. The submission highlights a need for investment to address issues relating to wetlands, stormwater inflow and community involvement in waterways. ${ }^{53}$ It also promotes the need for pilots and experimentation to find solutions that will generate benefits in the long term.

Conversely, the Urban Development Industry of Australia Victorian Division notes that it does not support the proposed increase in waterways and drainage pricing, arguing that the basis for the increase is unsubstantiated. ${ }^{54}$ The Consumer Action Law Centre also raises concerns about increased expenditure (and prices) based on surveys where consumers are asked to pay for a good or service they are unfamiliar with or where the benefit to them is ambiguous. ${ }^{55}$

Both VicWater and the Water and Sewerage Customer Council support Melbourne Water's commitment to integrated water management schemes, with VicWater highlighting stormwater harvesting investment. ${ }^{56}$ The submissions note that such projects are not yet mature, which can make it difficult to demonstrate net incremental benefits. While we note that Deloitte's expenditure review did make brief reference to cost-benefit analysis, this was not the only concern raised about these investments. Our draft decision also did not state that we expected Melbourne Water to show that projects generate net benefits. We instead noted that the proposed additional

[^24]expenditure would be assessed to determine whether it is prudent and efficient, and invited Melbourne Water to provide more evidence to support this assessment. ${ }^{57}$

## Our final decision

## Adjustments to controllable operating expenditure

After considering the additional information provided by Melbourne Water and Deloitte's review of this information, our final decision accepts Melbourne Water's response to our draft decision to reinstate:

- $\$ 0.8$ million to water and sewerage baseline year operating expenditure (or $\$ 4$ million over the 2021-26 regulatory period)
- \$21.2 million above baseline waterways and drainage operating expenditure over the 2021-26 regulatory period.

We accept Melbourne Water's explanation and Deloitte's updated recommendation that the $\$ 0.8$ million adjustment to the baseline year operating expenditure should be accepted because it relates to an historical correction and does not contribute to an ongoing higher allowance.

Our final decision also accepts Melbourne Water's response to reinstate $\$ 21.2$ million of waterways and drainage operating expenditure uplift. In accepting the proposed uplift, we are satisfied that making an allowance above baseline controllable operating expenditure is prudent and efficient. Some examples where such an allowance may be justified include where a business faces new obligations or a significant change in an expenditure item that cannot be absorbed within the baseline. As Melbourne Water has based its uplift request on a number of specific waterways and drainage investments, we have completed more detailed analysis below to establish the prudency and efficiency of allowing this additional expenditure. This does not mean that we are directly approving the expenditure for each specific purpose. Rather the more detailed analysis ensures there is justification for approving the requested uplift above the baseline.

Our final decision is supported by business cases provided by Melbourne Water and further analysis by Deloitte. We have accepted Deloitte's recommendation to include an additional $\$ 10.2$ million of expenditure based on the following:58

- $\$ 1.2$ million related to stormwater quality treatment systems - supported on the basis that substantial growth in wetland has increased the requirement for Melbourne Water. Though an amount this small would normally be expected to be absorbed within the baseline expenditure.

[^25]- $\$ 3.5$ million related to flood mitigation - supported given the strong benefit cost ratios and the ability to expand the pilot more broadly. However, we do note the number of pilots Melbourne Water has run in this area and expect future price review submissions would provide more detail on the results to justify why future baseline expenditure should not be lowered once those pilot projects cease.
- $\$ 2$ million related to community involvement in waterways - based on the large increase in community demand for these open spaces following the coronavirus pandemic and evidence of the associated benefits. Deloitte does note that the decision to include this amount on top of baseline expenditure does require some judgment based on the business case provided.
- $\$ 3.5$ million related to large scale stormwater harvesting - discussed further below.

Deloitte's review of the further information provided by Melbourne Water recommends not accepting $\$ 11$ million of the proposed uplift. Deloitte also notes that most of the proposed expenditure is likely to be prudent and efficient, but questions either the timing need or whether it should be included above the baseline level. ${ }^{59}$ Our final decision to accept this amount is informed by this analysis and our assessment of the additional business cases from Melbourne Water. We have accepted the additional $\$ 11$ million uplift on the following basis:

- \$8 million related to large scale stormwater harvesting - this expenditure relates to supporting a capital program, carrying out further analysis and investigation, and funding research, policy and monitoring. While Deloitte recognises that this expenditure may be required in some form in the medium term, it proposed only accepting $\$ 3.5$ million as noted above (half of the allocation related to further investigation and research). Our decision to accept the remaining $\$ 8$ million is based on two factors. Firstly, we have accepted Melbourne Water's proposal not to update its waterways and drainage demand forecasts, which indicates these projects will likely need to be started in the next five years. Secondly, the business cases provided demonstrate that these projects are an appropriate response to avoid potential harm to waterways. The concerns raised by Deloitte relate more to the limited clarity on how stormwater will be used once harvested. While we have accepted that an additional amount should be included in the benchmark allowance, we expect Melbourne Water to take steps to address the concerns raised that are discussed further below.
- $\$ 1.5$ million related to wetland condition - we note Deloitte's view that Melbourne Water has not clearly demonstrated that this expenditure should be added on top of the baseline. After reviewing the business case provided by Melbourne Water, we agree that an additional $\$ 1.5$ million be added above the baseline. This is based on evidence that the impacts of climate change and urbanisation are increasing the expenditure required to maintain wetland condition.

59 lbid.

- $\$ 1.5$ million related to flood preparedness - Deloitte considers this expenditure is prudent and efficient, but the small amount would ordinarily be captured in the baseline expenditure given the project is not responding to new or increased obligations. After reviewing the business case provided by Melbourne Water, we accept that the proposed additional expenditure aims to link a range of responses and deliver increased benefits of an end-to-end solution. On this basis we have accepted the additional allowance requested by Melbourne Water. However, we note that Melbourne Water has not considered how expenditure previously allocated for pilots and trials in this area has been considered in the need for uplift. In the next price review, we expect Melbourne Water to clarify how any claims for additional expenditure have considered offsetting reductions following the end of related trials and pilots supported in the current and previous price submissions.

While we have accepted the uplift requested in Melbourne Water's response to our draft decision, we recognise that Deloitte's review does not recommend accepting the full uplift requested.
Deloitte's recommendation is based on concerns largely relating to the actual outcomes and benefits expected or whether the expenditure will be needed in this regulatory period given the impact of the pandemic, rather than expenditure not being efficient and prudent.

As Melbourne Water's submission and response highlights expenditure on these items was supported by particular stakeholder groups throughout engagement, Melbourne Water must report annually on the investments it has made, the expected benefits and the outcomes being achieved. We suggest that Melbourne Water's annual outcomes reporting would provide a suitable channel for this.

At Melbourne Water's next price review, we would also consider the outcomes delivered from the uplift in expenditure to be considered as part of its Performance rating for PREMO. This would be in conjunction with evidence Melbourne Water will need to demonstrate how much, if any, of the expenditure uplift approved in this final decision should be included in baseline operating expenditure in the 2026 price review. This would help address the concerns raised by Deloitte and provide further information to support the assessment of benchmark controllable operating expenditure in future price reviews.

Given the interest in the expenditure uplift from the Waterways and Drainage Customer Council, we expect Melbourne Water would also report on outcomes to this group. However, as discussed in chapter 3, we consider Melbourne Water should also engage with a more representative group of end-use customers to get community views and expectations about services and prices, in order to inform its investment decisions.

Our final decision also accepts the additional adjustments made to electricity costs in Melbourne Water's response, which reduces water and sewerage controllable operating expenditure by $\$ 5.05$ million over the 2021-26 regulatory period. We appreciate that Melbourne Water has
responded with much of the additional information requested in our draft decision relating to electricity costs that provide greater transparency about the impact for customers. ${ }^{60}$

## Operating expenditure growth and efficiency rates

In making our draft decision we adopted Deloitte's recommendation to apply provisional growth and efficiency rates, expecting Melbourne Water to revise these rates in response to updated demand forecasts. We also requested further justification for the proposed relationship between customer growth and expenditure growth. ${ }^{61}$

We appreciate that Melbourne Water's response provides analysis to establish a correlation between customer growth and the regulatory asset base, and subsequently between the regulatory asset base and operating expenditure. However, Melbourne Water's response to our draft decision maintains the provisional growth and efficiency rates, and does not clarify how these correlations establish a one-to-one relationship between customer and expenditure growth in both of its business areas. While we note Melbourne Water's statement that the net efficiency rate is the only element that matters for prices and customers ${ }^{62}$, we reiterate that simply focusing on the net efficiency rate does not follow the approach set out in our guidance. ${ }^{63}$

After considering Melbourne Water's response, we have decided to accept it in our final decision because it delivers the savings to customers proposed in our draft decision, even though it has not fully addressed the expectations set out in our draft decision. Melbourne Water will need to provide a more robust justification for its proposed expenditure growth rates in its next price review submission, as stipulated in our guidance.

### 5.2. Non-controllable operating expenditure

## Our draft and final decision

For non-controllable operating expenditure we have updated draft decision forecasts for environmental contribution and Environment Protection Authority Victoria license fees based on the latest inflation data. We have also updated the timing of an uplift in the Essential Services Commission license fee to reflect that we have approved a five-year regulatory period for our final decision.

[^26]There have been no changes to the Department of Health Safe Drinking Water Act administration levy or desalination security payment forecasts. Environmental contribution has reduced by $\$ 0.05$ million from $\$ 4.6$ million to $\$ 4.5$ million over the five-year regulatory period, and the Environment Protection Authority Victoria license fee has reduced by $\$ 0.09$ million from $\$ 6.8$ million to $\$ 6.7$ million over the five-year regulatory period. These reductions are reflected in our final decision for total non-controllable operating expenditure forecasts in Table 5.2.

Since our draft decision, we have updated estimates for land tax and payroll tax based on information provided to us by Melbourne Water.

Table 5.2 Adjustments to draft decision operating expenditure
\$ million 2020-21

|  | 2021-22 | 2022-23 | 2023-24 | 2024-25 | 2025-26 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Draft decision - operating expenditure | 938.8 | 928.5 | 917.7 | 906.3 | 896.8 | 4,588.0 |
| Water and sewerage - baseline | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 4.0 |
| Water and sewerage - electricity | -0.4 | -1.2 | -0.5 | -1.4 | -1.5 | -5.1 |
| Waterways and drainage - baseline | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 21.2 |
| Total controllable costs adjustments | 4.6 | 3.9 | 4.5 | 3.6 | 3.5 | 20.1 |
| Licence fees - ESC | - | - | -0.6 | - | 0.6 |  |
| Licence fees - EPA | -0.01 | -0.01 | -0.02 | -0.03 | -0.03 | -0.09 |
| Environment contribution | -0.004 | -0.01 | -0.01 | -0.01 | -0.02 | -0.05 |
| Land and payroll tax - W\&S | 1.0 | 1.2 | 1.2 | 1.2 | 1.2 | 5.8 |
| Land and payroll tax - W\&D | 2.5 | 2.6 | 2.6 | 2.6 | 2.7 | 13.0 |
| Total non-controllable costs adjustments | 3.5 | 3.8 | 3.2 | 3.8 | 4.4 | 18.6 |
| Final decision - operating expenditure | 946.9 | 936.1 | 925.4 | 913.7 | 904.7 | 4,626.8 |

Note: numbers have been rounded
The Environmental Contribution collects funds from water corporations under the WI Act; Licence fees are paid to cover costs incurred by Department of Health (DH), Environment Protection Authority Victoria (EPA), and the Essential Services Commission (ESC) in their regulatory activities related to the water corporation.

## 6. Capital expenditure

Expenditure to maintain existing assets and establish new assets that serve water retailers and end-use customers over the longer term is referred to as capital expenditure. The core drivers of the forecast capital expenditure are infrastructure renewal to maintain or rehabilitate services, to comply with policy and technical standards, and to meet historical and forecast population growth. In its price submission, Melbourne Water indicated that of these three drivers, the largest increase of capital expenditure for the 2021-2026 regulatory period was population growth.

Capital expenditure is a key component of Melbourne Water's revenue requirement. Prices reflect capital expenditure through the rate of return on the regulatory asset base (RAB) - that is, the weighted average cost of capital (WACC) multiplied by the RAB - and a return of the RAB (through regulatory depreciation).

Section 6.1 discusses Melbourne Water's proposed capital expenditure program over the period, while Section 6.2 discusses Melbourne Water's proposed approach to its capitalisation of Victorian Desalination Plant security payments.

### 6.1. Capital expenditure benchmark

## Our draft decision

Our draft decision adopted a capital expenditure benchmark of $\$ 2,271.1$ million over a three-year period starting 1 July 2021. As noted earlier, our final decision approves a five-year pricing period from 1 July 2021. This is different to the three years approved in our draft decision.

However, our draft decision included a proposed capital expenditure benchmark over five years. We have compared our final decision revenue requirement (and other forecasts) to these five-year estimates to show key changes since our draft decision.

In our draft decision we proposed to reduce Melbourne Water's forecast capital expenditure (excluding the capitalisation of its Victorian Desalination Plant security payments) of $\$ 3,702.2$ million for the 2021-26 period, to $\$ 3,405.4$ million, a reduction of $\$ 296.8$ million.

Our reductions were based on our assessment of advice provided to us by Deloitte Access Economics. We engaged Deloitte to provide advice to inform our assessment of Melbourne Water's capital expenditure program. Deloitte's report is available on our website. ${ }^{64}$

[^27]Deloitte reviewed 15 of Melbourne Water's major capital projects, recommending timing adjustments to three projects, and cost adjustments to the following four:

- Winneke Treatment Plant - UV Disinfection
- Western Treatment Plant 55E Activated Sludge Plant Upgrade
- Maribyrnong Main Sewer Augmentation
- Western Treatment Plant Gas Plant Renewal.

The total reduction we proposed in our draft decision for the above projects was $\$ 46.8$ million, or 4.4 per cent of Melbourne Water's proposed capital expenditure for the 15 major projects reviewed by Deloitte.

We also adopted Deloitte's recommended reduction of $\$ 250$ million across the rest of the capital program (an average reduction of $\$ 50$ million per year), to better balance risk associated with delivering its capital program between Melbourne Water and its customers. We stated in our draft decision that we adopted a reduction of $\$ 250$ million to address the risk that not all the proposed capital projects go ahead within the period given the ongoing uncertainty caused by the coronavirus pandemic, Melbourne Water's high demand forecasts and overall cautious approach to forecasting capital expenditure over the period. Our draft decision was not to apply this reduction to any particular capital project or programs directly, but rather to apply the reduction broadly across Melbourne Water's proposed capital program.

## Melbourne Water's response and submissions to our draft decision

In response to our draft decision, Melbourne Water accepted our adjustments to the Maribyrnong Main Sewer Augmentation and Western Treatment Plant Gas Plant Renewal projects but sought the reinstatement of $\$ 8.5$ million for the Winneke Treatment Plant - UV Disinfection project and $\$ 12$ million for the Western Treatment Plant 55E Activated Sludge Plant Upgrade.

Melbourne Water also accepted our reduction of $\$ 250$ million across the remainder of its capital program. However, we note that although Melbourne Water adopted revised demand forecasts in response to our draft decision, it has not adjusted its growth related capital expenditure. It instead states that any further cuts to growth related expenditure would significantly increase the risk of service degradation below acceptable limits. Melbourne Water also stated that the coronavirus pandemic's impact on Melbourne's population growth (and therefore forecast demand) is likely to reduce growth related capital expenditure in the 2026-2031 regulatory period, not the upcoming 2021-26 regulatory period. ${ }^{65}$

[^28]Melbourne Water has chosen to apply the $\$ 250$ million dollar reduction across its renewals capital expenditure programs. Melbourne Water has also chosen to remove its proposed capital expenditure profile smoothing approach it had adopted in its initial price submission, which had the impact of removing $\$ 42.9$ million in depreciation from the revenue requirement over the course of the five-year regulatory period. Melbourne Water stated that our draft decision did not appear to acknowledge this initiative as an important step to address uncertainty. Melbourne Water also put forward that our $\$ 250$ million reduction and its own profile smoothing approach amounted to a 'double-up', given both its smoothing approach and our $\$ 250$ million reduction have a similar impact on Melbourne Water's revenue requirement. ${ }^{66}$

Additionally, in a further proposal made to the commission after we received its price submission, Melbourne Water put forward a potential mechanism to return revenue collected for capital projects that do not occur in the regulatory period through lower prices if the value of undelivered capital projects exceeds a threshold value of $\$ 100$ million.

VicWater submitted that our draft decision appears to support reductions of $\$ 98$ million in capital expenditure (and associated operating expenditure) for stormwater harvesting schemes, on the basis that the associated business cases did not sufficiently demonstrate that each project would result in a net incremental benefit. VicWater also stated business cases for stormwater harvesting are typically less comprehensive than traditional practices, as stormwater harvesting is a still evolving industry practice, but an important one given the implications for the Victorian water sector and the objectives of the Water for Victoria plan. ${ }^{67}$

The Water and Sewerage Customer Council supported Melbourne Water's commitment to pursuing integrated water management schemes, while recognising our views regarding the evidence to demonstrate the costs and benefits of these schemes. ${ }^{68}$

Additionally, the Yarra Riverkeeper Association submitted that we did not agree to a number of proposed environmental expenditure items proposed by Melbourne Water, and that Deloitte misunderstood how environmental works are costed, assessed and delivered. The Yarra Riverkeeper Association also submitted that a portion of waterways and drainage operating expenditure needs to be considered as capital expenditure. ${ }^{69}$

We received an anonymous submission opposing the Bunyip River Diversion project and the Cement Creek Diversion Works project. The stakeholder stated that the proposals would yield

[^29]small amounts of water, while having high environmental impacts to the Yarra Ranges National Park and Bunyip State Park. The stakeholder questioned if Melbourne Water had given adequate consideration of environmental flow recommendations or considered the impacts of climate change on the harvesting capacity of the new diversions. The stakeholder also stated they did not consider sufficient public consultation had been undertaken for these projects given their impacts on relevant biodiversity assets. ${ }^{70}$

The Water and Sewerage Customer Council also submitted that it is not clear in Melbourne Water's submission if it has improved the allocation of risk on behalf of its customers between price submission 2016 and price submission 2021, and it would welcome further clarity around the weighting of risk between Melbourne Water and its customers in the final submission. The council also stated it anticipated Melbourne Water would consider the impacts of the pandemic on growth and demand forecasting, and the subsequent impact on growth related capital expenditure. ${ }^{71}$

Consumer Action Law Centre supported our draft decision relating to demand forecasting and suggested that in light of lower population forecasts Melbourne Water could reconsider its capital expenditure and whether projects can be deferred. ${ }^{72}$

## Our final decision

In its response to our draft decision, Melbourne Water provided additional information on its capital expenditure proposals. As part of the expenditure review, Deloitte reviewed this new information and provide updated recommendations. ${ }^{73}$

[^30]Table 6.1 Final decision - capital program expenditure
\$ million 2020-21

|  | $2021-22$ | $2022-23$ | $2023-24$ | $2024-25$ | $2025-26$ | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Water | 172.3 | 238.3 | 122.4 | 111.8 | 128.9 | $\mathbf{7 7 3 . 7}$ |
| Sewerage | 327.3 | 376.3 | 284.7 | 283.2 | 133.2 | $\mathbf{1 , 4 0 4 . 8}$ |
| Recycled Water | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | $\mathbf{0 . 6}$ |
| Waterways and Drainage | 247.8 | 274.4 | 234.5 | 239.2 | 237.0 | $\mathbf{1 , 2 3 2 . 8}$ |
| Diversions | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | $\mathbf{2 . 1}$ |
| Final decision - capital <br> program expenditure | $\mathbf{7 4 8 . 0}$ | $\mathbf{8 8 9 . 5}$ | $\mathbf{6 4 2 . 1}$ | $\mathbf{6 3 4 . 7}$ | $\mathbf{4 9 9 . 7}$ | $\mathbf{3 , 4 1 4 . 0}$ |

Note: numbers have been rounded

## Review of forecast major capital project expenditure

In response to our draft decision, Melbourne Water provided further information explaining the increase in costs for the Winneke Treatment Plant - UV Disinfection project. The increase is tied to complexities in managing site conditions, additional design and investigation costs and costs associated with delivering on a larger project scope. Melbourne Water also provided a recent Functional Business Case approved by its board, which outlined that the forecast cost for this project had now increased from the original $\$ 43.1$ million included in its 2021 price submission, to $\$ 65.3$ million. Melbourne Water has stated that in order to meet the full funding requirements for this project, it will seek to find efficiencies in this and other projects across its capital program.

In reviewing the new information provided by Melbourne Water, Deloitte has recommended reinstating the $\$ 8.5$ million our draft decision proposed to remove from this project, because the project remains necessary and a suitable level of certainty around the total costs for this project has now been reached.

For our final decision, we accept Melbourne Water's proposal to reinstate $\$ 8.5$ million for this project, to bring the total cost allowance for this project in line with Melbourne Water's originally requested amount of $\$ 43.1$ million.

While we acknowledge that capital expenditure timing forecasting and project timing is not always exact, we note that this project was first proposed and approved with a total cost of $\$ 34.6$ million as part of Melbourne Water's 2016 price submission, and is now being approved again with a material increase in costs. We also acknowledge Melbourne Water's commitment to finding cost efficiencies in both this individual project and across its capital program and consider this constitutes a reasonable and well accepted approach that meets our expectations of how a prudent and efficient water corporation would propose to deliver its capital expenditure program.

## Capital expenditure

Our draft decision also proposed a reduction of $\$ 12$ million to the Western Treatment Plant 55E Activated Sludge Plant project, which more closely aligns the project's costs with a similar project Melbourne Water had recently completed, the 160S Nitrogen Removal Plant, and addresses likely efficiencies that can be achieved throughout the design and delivery process.

In response to our draft decision Melbourne Water has requested the reinstatement of the proposed $\$ 12$ million reduction in capital expenditure for this project, on the basis the 160S Nitrogen Removal Plant cannot be compared to the WTP 55E Activated Sludge Plant project due to differences in the technical requirements and functionality of the projects. Melbourne Water provided additional reasoning explaining the differences between the two projects.

In reviewing the reasoning provided by Melbourne Water, Deloitte has maintained its initial recommendation of a $\$ 12$ million reduction to the Western Treatment Plant 55E Activated Sludge Plant project, on the basis that the information provided by Melbourne Water did not present materially new information in support of the full amount of capital expenditure.

For our final decision we maintain our draft decision reduction of $\$ 12$ million for to the Western Treatment Plant 55E Activated Sludge Plant project, allowing a total capital expenditure benchmark of $\$ 199.8$ million for the project across the 2021-26 regulatory period.

In response to the anonymous submission, we note that Deloitte reviewed the Cement Creek Diversion Works project and found the expenditure to be efficient, and the project to be a prudent approach to respond to potential future water shortages. Deloitte's expenditure review did recommend an adjustment to the timing of the project to align its completion with when it is more likely to be needed. We accepted the project with Deloitte's timing adjustment, on the basis the proposed expenditure was both prudent and efficient.

We also note that expenditure relating to the Bunyip River Diversion project has been forecast by Melbourne Water to occur beyond the 2021-26 regulatory period, and therefore costs will not be passed onto customers through prices in the 2021-26 regulatory period. As such, the prudency and efficiency of this project will be assessed as part of the next price review of Melbourne Water.

## Adjustments to the remaining capital expenditure program

Our final decision maintains our draft decision reduction of $\$ 250$ million across the capital program. We have accepted Melbourne Water's application of the reduction but reiterate our final decision does not apply to any specific project or program. Additionally, we reiterate that our draft decision adjustment was made to address uncertainty that Melbourne Water would still deliver the entire capital program in the regulatory period, given the ongoing uncertainty caused by the coronavirus pandemic, Melbourne Water's demand forecasts and the overall approach it has taken to forecasting capital expenditure it included in its price submission. Melbourne Water will have the
opportunity to true-up its asset base at the end of the regulatory period to reflect actual prudent and efficient expenditure incurred over the period.

In contrast, we note that Melbourne Water's capital expenditure profile smoothing, which it has now chosen to remove, did not seek to reduce the total amount of capital expenditure included in the regulatory period in response to the still unclear impacts of the coronavirus pandemic. Rather it lowered the depreciation earnt on the full amount of capital expenditure that it included in its price submission. That is, Melbourne Water still anticipated the full capital program to go forward in the period, but its smoothing approach balanced the risk of when the expenditure might occur in the period, to address the risk of customers paying for assets before they were completed.

Contrary to Melbourne Water's claims, we did acknowledge its capital profile smoothing approach in our PREMO risk discussion in our draft decision, and considered that this approach alone did not adequately address the uncertainty associated with its expenditure program. ${ }^{74}$ In response, we proposed our further adjustment of $\$ 250$ million for the reasons given above. Melbourne Water's profile smoothing mechanism (providing a $\$ 42.9$ million reduction to the revenue requirement) and our $\$ 250$ million adjustment (a $\$ 45.9$ million reduction to the revenue requirement) do have similar impacts on the revenue requirement over the regulatory period. However, we did not institute our reduction to replace Melbourne Water's profile smoothing as Melbourne Water's smoothing addresses timing of projects within the period, while our adjustment addresses the likelihood some projects will not be required during the period.

Given these two adjustments address different risks, we do not consider that they constitute a 'double-up' as suggested by Melbourne Water. This reversal directly counters the additional customer protection against the pandemic uncertainty that our draft decision sought to provide. We discuss this further in our considerations of Melbourne Water's PREMO Risk and Management ratings in Chapter 13, and the impacts on depreciation in Chapter 4.

We also note that Melbourne Water has suggested a potential mechanism to return revenue collected for capital projects that do not occur in the regulatory period through lower prices if the value of undelivered capital projects exceeds a threshold value of $\$ 100$ million. We note that historically water corporation capital expenditure programs have often been 'lumpy', and that the actual costs and timings of projects do not always match forecasts. Therefore, we already expect all Victorian water corporations to effectively manage these differences throughout the regulatory period to protect customers against the risk excess revenue is collected for projects not occurring in the regulatory period. Our PREMO reporting framework requires water corporations to account for variations to their capital programs, including how they have addressed surplus revenue collection for delayed or deferred projects. This will also be a key consideration in the PREMO

[^31]Performance rating at the next price review, and we will monitor how Melbourne Water delivers on its proposal to customers. Melbourne Water's proposal is discussed further in chapter 13.

In response to submissions which raised concerns that our $\$ 250$ million reduction specifically included $\$ 98$ million dollars in stormwater harvesting projects, we acknowledge that Deloitte's review of Melbourne Water's expenditure did refer to the stormwater projects in its recommendation to reduce capital expenditure by $\$ 250$ million, citing a high degree of uncertainty in Melbourne Water's proposal for these projects. ${ }^{75}$ While we considered the total level of Deloitte's recommended reduction was appropriate given the factors outlined previously in this chapter, our draft decision did not specify that $\$ 98$ million of our reduction was to apply to the relevant stormwater harvesting projects put forward by Melbourne Water. As discussed in Chapter 5, our final decision accepts an additional allowance above baseline operating expenditure based on information set out in stormwater harvesting business cases. Though we do note the uncertainty and concerns Deloitte raises in relation to these projects. ${ }^{76}$ Consistent with our draft decision, our final decision reduction of $\$ 250$ million does not specifically apply to stormwater harvesting projects.

We acknowledge Melbourne Water's legislative and regulatory requirements to undertake activities to manage urban waterways and protect and sustain the environment. ${ }^{77}$ But we note stormwater harvesting and integrated water management programs are emerging industry initiatives, and it can be challenging for water corporations to demonstrate and quantify the benefits for proposed projects. Where they cannot do so, we expect water corporations will manage proposed expenditure uncertainty to minimise the cost risk to customers, in accordance with our guidance. We will monitor with interest the delivery of these projects over the course of the regulatory period and how effectively they achieve their intended outcomes.

[^32]Table 6.2 Adjustments to draft decision capital program expenditure
\$ million 2020-21

|  | $2021-22$ | $2022-23$ | $2023-24$ | $2024-25$ | $2025-26$ | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Draft decision - capital <br> program expenditure | 747.7 | 884.2 | 639.2 | 634.7 | 499.7 | $\mathbf{3 , 4 0 5 . 4}$ |
| Winneke Treatment Plant UV <br> Disinfection System | 0.3 | 5.4 | 2.9 | - | - | 8.5 |
| Final decision - capital <br> program expenditure | 748.0 | 889.5 | 642.1 | 634.7 | 499.7 | $\mathbf{3 , 4 1 4 . 0}$ |

Note: numbers have been rounded

## Final decision on capital expenditure

Our final decision is to adopt a capital expenditure benchmark allowance of $\$ 3,414$ million over the five-year regulatory period starting 1 July 2021.

### 6.2. Capitalisation of Victorian Desalination Plant security payments

Melbourne Water is obliged to pay for the security service provided by the Victorian desalination plant's current operator over a lease period of 27 years (up to 2039) after which Melbourne Water will assume ownership of the plant. The desalination plant's asset life is much longer and Melbourne Water has the choice to reflect some of these security payments as part of its capital expenditure to reflect the plant's useful life when it transfers to Melbourne Water ownership.

## Our draft decision

Our draft decision proposed not to approve Melbourne Water's proposed approach to recovering security payments, reflecting the cost of financing and maintaining the Victorian desalination plant and related infrastructure, over the 2021-26 regulatory period. Melbourne Water's proposal was not consistent with our guidance to Melbourne Water or WIRO pricing principles (see section 6.4 of our draft decision for an in-depth discussion of our views in relation to this). ${ }^{78}$

[^33]
## Melbourne Water's response to our draft decision

Melbourne Water's response to our draft decision accepted our proposed adjustments to the capitalisation of desalination security costs. Table 6.3 shows Melbourne Water's revised treatment of security payment obligations consistent with our draft decision.

Table 6.3 Melbourne Water's revised treatment of desalination security payments \$ million 2020-21

|  | $2021-22$ | $2022-23$ | $2023-24$ | $2024-25$ | $2025-26$ | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Operating expenditure | 527.6 | 519.8 | 507.6 | 491.6 | 478.4 | $2,525.0$ |
| Capital expenditure | 20.3 | 29.9 | 45.2 | 54.7 | 62.9 | 213.0 |
| ${\text { Total } \text { expenditure }^{79}}$ | 547.9 | 549.7 | 552.7 | 546.3 | $\mathbf{5 4 1 . 3}$ | $\mathbf{2 , 7 3 8 . 0}$ |

## Our final decision

Two submissions commented on Melbourne Water's approach to capitalising desalination security costs. The Water and Sewerage Customer Council, in response to Melbourne Water's response to our draft decision, reiterated its original feedback in that the council supports the principle of intergenerational equity and Melbourne Water should capitalise more than $\$ 30$ million annually to avoid any future price shocks by enabling flat prices. ${ }^{80}$

Consumer Action Law Centre's submission to our draft decision expressed support for Melbourne Water capitalising a portion of the desalination security costs annually as it contributes to intergenerational equity and affordability for end-consumers. ${ }^{81}$ It queried our draft decision to not fully reflect Melbourne Water's price submission capitalisation proposal. Its reasoning is that our draft decision would result in higher bills for end-consumers over the 'remainder of the desalination plant life' and a higher amount does not appear to affect Melbourne Water's financial viability.

Our final decision accepts Melbourne Water's revised approach to recovering its desalination security payments, noting it is consistent with our draft decision.

While we note Consumer Action Law Centre's views on customer bill impacts, we reiterate our draft decision finding that capitalisation above the tax benchmark (as implied in Melbourne Water's

[^34]original proposal) would create a greater reduction in water prices from 2021-22 that has already been partly paid for by higher prices in previous generations of end-use customers.

Final decision on capitalisation of desalination security payments
Our final decision approves Melbourne Water's revised approach to recovering its desalination security payments consistent with our draft decision, with expenditure amounts adopted for our final decision set out at Table 6.3.

## 7. Financing capital investments

This chapter sets out our final decision on Melbourne Water's financing of capital investments, namely the regulatory asset base, the rate of return on investments, and financial position.

### 7.1. Rolling forward the regulatory asset base

The regulatory asset base is used to estimate the return on assets and regulatory depreciation in the revenue requirement. Our guidance required Melbourne Water to propose its:

- closing regulatory asset base at 30 June 2020
- forecast regulatory asset base for each year of the regulatory period from 1 July 2021.


### 7.1.1. Closing regulatory asset base

We update the regulatory asset base to reflect actual capital expenditure, government and customer contributions, and asset disposals for the period to 30 June 2020. This helps to ensure prices reflect the actual net expenditure of a water corporation. ${ }^{82}$

## Our draft decision

Our draft decision proposed to approve a closing regulatory asset base for 30 June 2020 of $\$ 11,337.9$ million, as it was calculated by Melbourne Water in accordance with the requirements of our guidance. No other new considerations were raised in submissions on our draft decision that affected our assessment of the closing regulatory asset base.

## Our final decision

Final decision on closing regulatory asset base
Our final decision approves a closing regulatory asset base for 30 June 2020 of $\$ 11,337.9$ million. Table 7.1 sets out our final decision on Melbourne Water's closing regulatory asset base at 30 June 2020.

[^35]Table 7.1 Closing regulatory asset base
\$ million 2020-21

|  | $2015-16$ | $2016-17$ | $2017-18$ | $2018-19$ | $2019-20$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Opening RAB at 1 July | $10,534.2$ | $10,637.4$ | $10,804.8$ | $11,025.1$ | $11,216.8$ |
| Plus gross capital expenditure | 459.0 | 469.7 | 563.0 | 548.5 | 512.7 |
| Plus desal capitalisation | - | 32.8 | 32.8 | 32.8 | 32.8 |
| Less government contributions | - | - | - | - | - |
| Less customer contributions | 121.4 | 147.3 | 165.6 | 166.2 | 183.9 |
| Less proceeds from disposals | 9.3 | 9.0 | 13.8 | 11.1 | 14.4 |
| Less regulatory depreciation | 225.2 | 178.8 | 196.0 | 212.3 | 226.0 |
| Closing RAB at $\mathbf{3 0}$ June | $\mathbf{1 0 , 6 3 7 . 4}$ | $\mathbf{1 0 , 8 0 4 . 8}$ | $\mathbf{1 1 , 0 2 5 . 1}$ | $\mathbf{1 1 , 2 1 6 . 8}$ | $\mathbf{1 1 , 3 3 7 . 9}$ |

Note: numbers have been rounded

### 7.1.2. Forecast regulatory asset base

The forecast regulatory asset base is calculated having regard to the closing asset base, and forecasts for capital expenditure, government and customer contributions, and asset disposals.

## Our draft decision

Our draft decision on the forecast regulatory asset base differed from Melbourne Water's proposal due to our proposed adjustments to its forecast capital expenditure and approach to capitalisation of desalination security payments. We required Melbourne Water to recalculate the forecast regulatory asset base based on its assessment of our draft decision.

## Our final decision

Our final decision on the forecast regulatory asset base reflects our final decision on:

- the closing regulatory asset base (Section 7.1.1)
- capital expenditure (Chapter 6)
- customer (developer) contributions (Section 7.2)
- regulatory depreciation (Section 4.2).


## Final decision on forecast regulatory asset base

Table 7.2 sets out the commission's final decision on Melbourne Water's forecast regulatory asset base from 1 July 2021. Our assessment of the components of the forecast regulatory asset base is set out in the following sections. ${ }^{83}$

Table 7.2 Forecast regulatory asset base
\$ million 2020-21

|  | 2020-21 | 2021-22 | 2022-23 | $2023-24$ | $2024-25$ | $2025-26$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Opening RAB at 1 July | $11,337.9$ | $11,419.3$ | $11,868.4$ | $12,453.1$ | $12,776.9$ | $13,083.5$ |
| Plus gross capital expenditure | 423.3 | 748.0 | 889.5 | 642.1 | 634.7 | 499.7 |
| Plus desal capitalisation | 32.8 | 20.3 | 29.9 | 45.2 | 54.7 | 62.9 |
| Less government contributions | - | - | - | - | - | - |
| Less customer contributions | 121.7 | 119.3 | 119.3 | 124.9 | 119.8 | 133.1 |
| Less proceeds from disposals | 14.0 | 8.5 | 2.9 | 3.9 | 12.1 | 7.3 |
| Less regulatory depreciation | 239.0 | 191.3 | 212.6 | 234.5 | 250.9 | 265.0 |
| Closing RAB at $\mathbf{3 0}$ June | $\mathbf{1 1 , 4 1 9 . 3}$ | $\mathbf{1 1 , 8 6 8 . 4}$ | $\mathbf{1 2 , 4 5 3 . 1}$ | $\mathbf{1 2 , 7 7 6 . 9}$ | $\mathbf{1 3 , 0 8 3 . 5}$ | $\mathbf{1 3 , 2 4 0 . 6}$ |

Note: numbers have been rounded

### 7.2. Customer (developer) contributions

Developer contributions are paid by developers for funding drainage services schemes in growth areas and are deducted from gross capital expenditure so they are not included in the regulatory asset base.

In its price submission, Melbourne Water forecast developer contributions would be 21 per cent lower over the five years from 1 July 2021, compared to the previous regulatory period, reflecting a significant reduction in growth.

## Our draft decision

In our draft decision, we required that Melbourne Water update its forecasts for developer contributions for 2021-2026 to account for updated state government population forecasts and the decline in net overseas migration. We also noted Melbourne Water applied a higher inflation

[^36]forecast than our guidance when converting nominal to real values for the developer contributions forecasts. Melbourne Water clarified that it has developed its forecast developer contribution revenue in real 2020-21 dollars. Therefore, there would be no change if our forecast inflation rate of 1.7 per cent was applied as the escalation/de-escalation would give the same result.

## Melbourne Water's response to our draft decision

Melbourne Water proposes to retain its original developer contribution forecasts on the basis that: ${ }^{84}$

- there is land development activity driven by pre-pandemic migration
- forward contracts developers are entering into Melbourne Water with commitments to pay contributions and construct infrastructure in new subdivisions across Melbourne, driven by their expectation of future lot sales.
- that land developers' contract requests for the next three years are close to being fully subscribed.

We received a submission from Urban Development Institute of Australia Victorian Division that supports Melbourne Water's claims of strong demand by the greenfield development sector operating in Melbourne's growth areas. ${ }^{85}$ It advised this strong demand can be explained by a range of factors, including state and federal stimulus measures such as the HomeBuilder grant, the 50 per cent waiver on stamp duty, and the JobKeeper program.

## Our final decision

We accept Melbourne Water's forecasts and reasons for staying with its original forecasts, noting Urban Development Institute of Australia's submission in support of Melbourne Water's approach. Melbourne Water's developer contributions forecasts are as set out at Table 7.2.

### 7.3. Rate of return

In our guidance paper, we set out our process for estimating the regulatory rate of return. A regulatory rate of return is applied to the regulated asset base to calculate the annual return on the regulated asset base to be included in the revenue requirement. The regulatory rate of return comprises two components: a cost of debt and a return on equity (based on the PREMO rating).

[^37]
### 7.3.1. Cost of debt

## Our draft decision

Our draft decision proposed to adopt the cost of debt (nominal) estimate for 2020-21 proposed by Melbourne Water. ${ }^{86}$

## Our final decision

There were no submissions in response to our draft decision that raised matters to cause us to change our view on the cost of debt. We have updated the cost of debt estimate to reflect the updated data on bond yields. ${ }^{87}$ We have adopted the benchmark cost of debt as set out in Table 7.3.

Table 7.3 Trailing average cost of debt
Nominal dollars

|  | $2011-12$ | $2012-13$ | $2013-14$ | $2014-15$ | $2015-16$ | $2016-17$ | $2017-18$ | $2018-19$ | $2019-20$ | $2020-21$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Cost of <br> debt | $6.31 \%$ | $5.27 \%$ | $7.05 \%$ | $5.36 \%$ | $5.27 \%$ | $4.91 \%$ | $4.53 \%$ | $4.61 \%$ | $3.31 \%$ | $3.05 \%$ |

Note: numbers have been rounded

### 7.3.2. Forecast inflation

Forecast inflation is a key input to calculating the trailing average cost of debt. Our methodology for estimating forecast inflation has not changed throughout our review of Melbourne Water's prices. We forecast inflation using the midpoint of 'RBA geometric' and 'bond breakeven' inflation rates (market-based method) approaches. We consider our approach is consistent with our guidance. We also used the same methodology to estimate forecast inflation in our 2020 water price reviews for Goulburn Murray Water, South Gippsland Water and Western Water.

We applied our methodology to forecast inflation of 1.7 per cent for Melbourne Water's price submission model. This model was provided to Melbourne Water prior to lodgement of its price submission.

[^38]
## Our draft decision

In our draft decision we noted that the estimate of forecast inflation based on our methodology was around 2 per cent per year. We retained the price submission inflation forecast of 1.7 per cent in our draft decision, but noted we would review the estimate for our final decision based on latest available market data.

## Melbourne Water's response to our draft decision

In response to our draft decision, Melbourne Water proposed a change to our methodology to forecast inflation for our final decision. It proposed forecast inflation be estimated based on a geometric mean of the RBA's forecasts over the final price decision regulatory period (noting this does not incorporate a market-based approach). ${ }^{88}$

## Our final decision

Consistent with our draft decision, we have updated forecast inflation for our final decision based on our methodology and for the latest available market data. We consider this supports consistency in approach. We also consider our methodology (that is, the midpoint of 'RBA geometric' and 'bond breakeven' inflation rates) to calculate forecast inflation is simple, transparent, and replicable. All necessary information is publicly available. ${ }^{89}$

We have reviewed Melbourne Water's proposed methodology to estimate forecast inflation and do not consider it is consistent with our guidance (which is to incorporate the latest available market data in our forecasts). We also note that stakeholders have not had sufficient opportunity to consider Melbourne Water's alternative approach, given it was submitted later in our process.

We engaged Frontier Economics to estimate forecast inflation based on our methodology. ${ }^{90}$ We have reviewed Frontier's estimate and consider it is appropriate to adopt for the purpose of setting prices.

We have adopted an inflation forecast of 2.2 per cent over the regulatory period 2021-26, which is based on the mid-point of:

- RBA geometric method: inflation forecast estimated using the RBA's latest short-term inflation forecasts outlined in its May 2021 Statement on Monetary Policy and the midpoint of the RBA's

[^39]medium-term inflation target range. This produces an inflation forecast of 2.3 per cent, which we consider should apply over the regulatory period 2021-26.

- Bond breakeven method: inflation forecast estimated using differential between nominal government bonds and CPI-indexed government bonds. ${ }^{91}$ This produces an inflation forecast of 2.1 per cent, which we consider should apply over the regulatory period 2021-26.

We note the inflation forecast adopted in our final decision is close to those set by other regulators in their recent decisions. ${ }^{92}$

Table 7.4 Forecast inflation estimate

|  | Final decision | RBA geometric | Bond breakeven |
| :--- | :---: | :---: | :---: |
| Forecast inflation | $\mathbf{2 . 2 \%}$ | $2.3 \%$ | $2.1 \%$ |

Note: numbers have been rounded

### 7.3.3. Return on equity - PREMO rating

Melbourne Water rated its price submission as 'Advanced'. Based on its PREMO self-rating, Melbourne Water proposed a rate of return on equity of 4.8 per cent per year (real). This reflects the maximum return rate allowed in our guidance for a price submission rated as 'Advanced' ${ }^{93}$

## Our draft decision

Our draft decision proposed not to accept Melbourne Water's PREMO self-rating of 'Advanced' and instead proposed a rating of 'Standard'. This resulted in a return on equity of 4.2 per cent per year (real). ${ }^{94}$

## Melbourne Water's response to our draft decision

In response to our draft decision, Melbourne Water is seeking to re-instate its PREMO rating to 'Advanced' in its written submission.

[^40]
## Our final decision

Our final decision is to retain the return on equity at 4.2 per cent. Our justification for this decision is explained in Chapter 13 - PREMO rating.

## Final decision on the rate of return

Our final decision on Melbourne Water's trailing average cost of debt (nominal) is set out in Table 7.3.

Our final decision on Melbourne Water's return on equity is 4.2 per cent (in real terms, after tax), which reflects our assessment of Melbourne Water's PREMO rating (see Chapter 13).

### 7.4. Financial position

In approving prices, we must have regard to the financial viability of the water industry. ${ }^{95}$ We interpret the financial viability requirements under the Essential Services Commission Act 2001 and the Water Industry Regulatory Order 2014 to mean that the prices we approve should provide a high level of certainty that each water corporation can generate sufficient cash flow to deliver on service commitments, including financing costs arising from investments to meet service expectations.

We assess a water corporation's forecast financial position using four key indicators. ${ }^{96}$ Our assessment takes into account our proposed adjustments to revenue and costs, including our final decision on the return on equity.

The outcomes of this assessment are shown at Table 7.5. We note that interest cover remains above the minimum bound we use to assess financial viability. This indicates Melbourne Water will have sufficient cash flow to meet its debt repayment obligations and cover recurrent operating costs. Gearing is expected remain at a very healthy level, averaging around 35 per cent during the regulatory period, which is well below the commission's 70 per cent threshold. ${ }^{97}$

We consider our final decision will provide sufficient cash flow for Melbourne Water to meet its service commitments, and cover financing costs over the next five-year period.

[^41]Melbourne Water received a 'credit opinion' on its financial position reviewed by an independent credit rating agency. ${ }^{98}$ The credit opinion supports our current view that Melbourne Water's financial position is sound.

## Table 7.5 Final decision - financial performance indicators

|  | Commission threshold | 2021-22 | 2022-23 | 2023-24 | 2024-25 | 2025-26 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FFO interest cover (times) | > 1.5 times | 3.9 | 4.0 | 4.2 | 4.3 | 4.5 |
| Net Debt / RAV (Gearing) (\%) | < 70 per cent | 35.0\% | 34.7\% | 35.8\% | 35.5\% | 35.2\% |

Note: FFO refers to 'funds from operations' and RAV refers to the 'regulatory asset value' (same as regulated asset base).

## Final decision of financial position

Our final decision considers that Melbourne Water will generate sufficient cash flow to deliver on service commitments, including financing costs arising from investments to meet service expectations. We have reviewed these indicators and assess that Melbourne Water's forecast financial position is consistent with an investment grade credit rating.

[^42]
## 8. Demand

This chapter sets out our final decision on Melbourne Water's proposed demand forecasts. We require demand forecasts from Melbourne Water in order to calculate the tariffs that Melbourne Water may charge its customers. Melbourne Water's demand forecasts also influence its operating and capital expenditure forecasts, which are discussed at Chapters 5 and 6.

## Our draft decision

Our draft decision proposed not to accept Melbourne Water's demand forecasts for the reasons outlined on pages 55 to 60 of our draft decision. ${ }^{99}$

We asked Melbourne Water to revise its population growth forecasts in response to our draft decision to better reflect the impact of the coronavirus pandemic and consider other potentially more relevant demand drivers. We asked Melbourne Water to:

- consider using employment and output growth rather than population growth as drivers for non-residential sewage forecasts
- update large non-residential sewage demand using the latest customer insights to incorporate potential changes in planned investments following the coronavirus pandemic.

We also expected Melbourne Water to:

- update its forecasts with the most recent information from water retailers
- address the sewage parameter growth rates which appeared unreasonably high and provide justification for its chosen approach.


## Melbourne Water's response and submissions to our draft decision

Melbourne Water's response to our draft decision provided new information that waterways and drainage demand is a function of new dwellings rather than population. Melbourne Water also noted that the Centre for Population Projections forecasts are not consistent with observable development outcomes over the course of the pandemic. For these reasons Melbourne Water proposes to retain its original waterways and drainage forecasts.

Melbourne Water also provided new evidence of the value of signed contracts with developers for the first three years of the next five-year regulatory period to support retaining its price submission forecasts for waterways and drainage: ${ }^{100}$

[^43]- Melbourne Water has signed contracts for 2021-22 to the full value of its November 2020 price submission expenditure and revenue forecasts.
- Melbourne Water notes that the 2022-23 year is close to being fully subscribed in terms of signed contracts and a majority of 2023-24 is also subscribed.

Despite proposing to retain its original demand forecasts for waterways and drainage, Melbourne Water's waterways and drainage demand forecasts in its response to our draft decision are slightly higher than Melbourne Water's price submission forecasts.

Melbourne Water adjusted its population growth rate used to determine bulk water and sewage forecasts to match that of the Centre for Population Projections population forecasts which were published in December 2020. Melbourne Water also sought updated bulk water and sewage forecasts from City West Water, South East Water and Yarra Valley Water and used these to reestimate bulk water and sewage demand in its response to our draft decision. ${ }^{101}$

Melbourne Water's response to our draft decision compared to its price submission forecast sets out:

- Waterways and drainage demand over the 2021-26 period is 0.2 per cent higher.
- Bulk water demand over the 2021-26 period is 3.4 per cent lower.
- Sewage demand over the 2021-26 period is 2.5 per cent lower.

In addition to Melbourne Water's response, we received three submissions on demand:

- Consumer Action Law Centre supported our draft decision on demand as Melbourne Water noted it would be unlikely to absorb in full the higher revenue risk should population growth be closer to the state forecasts, and with lower population forecasts Melbourne Water could reconsider its capital expenditure so costs are not unnecessarily imposed on consumers. ${ }^{102}$
- The Urban Development Industry of Australia Victorian Division notes the greenfield development sector operating in Melbourne's growth areas is currently experiencing very strong demand due to factors including state and federal stimulus measures such as the HomeBuilder Grant, the 50 per cent waiver on stamp duty, and the JobKeeper program. ${ }^{103}$

[^44]
## Demand

- The Water and Sewerage Customer Council expects that the pandemic will impact the number and location of existing and future customers. ${ }^{104}$ We consider Melbourne Water has appropriately adjusted its population forecasts in its response to our draft decision to better include the impact of the pandemic on demand.


## Our final decision

We acknowledge that Melbourne Water re-engaged with retailers and made improvements to its demand forecasting approach in response to our draft decision.

We note that there were several errors in Melbourne Water's demand forecasting in its response to our draft decision. For example, we found that Melbourne Water misaligned the yearly population figures for Victoria in the Future 2019 and the Centre for Population Projections forecasts resulting in all population figures being used for a different year than the year which the population figures related to. These population figures were an input to calculating Melbourne Water's demand. While this particular error has no material impact, the number of small errors similar to this created a level of doubt around the accuracy of Melbourne Water's proposed demand forecasts, and is not consistent with an 'Advanced' submission.

In Melbourne Water's response to our draft decision, Melbourne Water acknowledged its next price submission will include updated sewage long run marginal costs and underlying demand forecasts with full consideration of the impact of demand on the timing of growth capital expenditure and operating expenditure. ${ }^{105}$ Melbourne Water also noted that it anticipates that chemical oxygen demand would be introduced (either as an addition to, or replacement of) biological oxygen demand as a measure of organic load in the treatable sewage parameter suite it uses for pricing purposes. ${ }^{106}$

We expect Melbourne Water at its next 2026 price submission to:

- review its sewage demand forecasting assumptions and approach and sewage long run marginal costs in consultation with the retailers who pay sewage tariffs to Melbourne Water ${ }^{107}$
- implement changes to bring its demand forecasting assumptions up-to-date and use these in its 2026 price submission.

[^45]In its price submission, Melbourne Water stated the importance of retailer's relative sewage demands:
> 'it is the relative, not absolute, demands that are most critical to the way in which retail water companies pay for their sewerage service.' (p. 5-17)

Melbourne Water's review of its sewage demand forecasts and long run marginal costs for its next price submission should also consider whether the relative demands of retailers are up-to-date since this affects the tariffs that retailers and their end use customers pay.

For the following reasons, we accept Melbourne Water's response to our draft decision on demand:

## Waterways and drainage demand

- Melbourne Water provided new evidence which supports its waterways and drainage demand proposal. This is consistent with information provided by the Urban Development Industry of Australia in its submission on our draft decision.
- Melbourne Water's waterways and drainage demand proposal ensures Melbourne Water bears higher risk and customers do not bear any additional risk compared to Melbourne Water's price submission proposal.


## Bulk water demand

- Melbourne Water sought updated forecasts from water retailers and adjusted its population growth rate to the Centre for Population Projections December 2020 growth rate to better reflect the impact of coronavirus on bulk water demand.


## Sewage demand

- Melbourne Water sought updated forecasts from water retailers and adjusted its population growth rate to the Centre for Population Projections December 2020 growth rate to better reflect the impact of coronavirus on sewage demand.
- Melbourne Water considered using employment and output growth rather than population growth as drivers for non-residential sewage forecasts.
- Melbourne Water sought latest customer insights on large non-residential sewage demand to incorporate potential changes in planned investments following the coronavirus pandemic.
- Melbourne Water committed to reviewing its sewage demand forecasting assumptions and approach and sewage long run marginal costs. We expect Melbourne Water to:
- do this in consultation with the retailers who pay sewage tariffs to Melbourne Water
- to implement changes to bring its demand forecasting assumptions up-to-date
- ensure these up-to-date assumptions are used in its 2026 price submission.


## Final decision on demand

Our final decision is to accept Melbourne Water's demand forecasts for waterways and drainage, bulk water and sewage provided in its response to our draft decision. Melbourne Water's demand forecasts are set out in Tables 8.1 to 8.3.

We note that Melbourne Water has committed to reviewing its sewage demand forecasting assumptions and approach and sewage long run marginal costs. We expect Melbourne Water to:

- do this in consultation with the retailers who pay sewage tariffs to Melbourne Water
- to implement changes to bring its demand forecasting assumptions up-to-date
- ensure these up-to-date assumptions are used in its 2026 price submission.

Table 8.1 Final decision on waterways and drainage demand
Number of customers

|  | 2021-22 | 2022-23 | 2023-24 | 2024-25 | 2025-26 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Residential on minimum | $2,018,447$ | $2,066,355$ | $2,091,472$ | $2,133,586$ | $2,176,935$ |
| Non residential on minimum | 130,511 | 137,058 | 143,962 | 152,710 | 161,419 |
| Non residential above minimum | 33,863 | 30,069 | 25,196 | 19,854 | 14,651 |
| Rural | 115,096 | 117,828 | 119,261 | 121,662 | 124,134 |

[^46]Table 8.2 Final decision on forecast bulk water volumes
Megalitres, Ml

|  | 2021-22 | 2022-23 | 2023-24 | $2024-25$ | 2025-26 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| City West Water | 113,034 | 113,519 | 114,640 | 115,835 | 116,474 |
| South East Water | 161,373 | 162,101 | 163,242 | 165,811 | 167,795 |
| Yarra Valley Water | 158,069 | 159,390 | 160,987 | 162,758 | 164,567 |
| Western Water | 13,309 | 14,398 | 15,514 | 17,162 | 17,521 |
| Barwon Water | 1,100 | 1,000 | 1,300 | 2,062 | 2,412 |
| South Gippsland Water | 800 | 800 | 800 | 800 | 1,000 |
| Westernport Water | 600 | 600 | 600 | 600 | 600 |
| Gippsland Water | 88 | 122 | 188 | 254 | 320 |

Source: Melbourne Water 2021, Price Submission 2021 - Response to ESC Draft Decision, 4 May.
Table 8.3 Final decision on forecast total sewage volumes
Megalitres, MI

|  | 2021-22 | 2022-23 | 2023-24 | 2024-25 | 2025-26 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Eastern Treatment Plant |  |  |  |  |  |
| South East Water | 82,926 | 83,101 | 83,170 | 83,275 | 83,465 |
| Yarra Valley Water | 45,523 | 45,503 | 45,834 | 46,390 | 46,880 |
| Western Treatment Plant |  |  |  |  |  |
| City West Water | 87,037 | 87,194 | 87,903 | 89,075 | 90,233 |
| South East Water | 26,601 | 26,648 | 26,760 | 26,944 | 27,136 |
| Yarra Valley Water | 77,691 | 77,878 | 78,234 | 78,833 | 79,483 |

Source: Melbourne Water 2021, Price Submission 2021 - Response to ESC Draft Decision, 4 May.

## 9. Bulk tariffs

The commission has approved prices for Melbourne Water that are based on our assessment of its revenue requirement, including the prudency and efficiency of forecast expenditure, and demand. Chapters 9 to 11 summarise approved prices and set out our final decision on tariff structures. Full details on approved tariffs are set out in Melbourne Water's price determination.

This chapter sets out our final decision on Melbourne Water's proposed bulk tariffs.
Melbourne Water provides bulk water and storage operator services and bulk sewerage services. It supplies these bulk water services to urban retailers City West Water, South East Water and Yarra Valley Water, and some regional water corporations including Barwon Water, Gippsland Water, South Gippsland Water, Western Water and Westernport Water. ${ }^{108}$ Melbourne Water also provides bulk sewerage services to City West Water, South East Water and Yarra Valley Water from its western treatment plant, and bulk sewerage services to South East Water and Yarra Valley Water from its eastern treatment plant.

### 9.1. Melbourne Water's bulk water tariffs

## Our draft decision

We proposed to approve Melbourne Water's proposal to retain its existing bulk water tariff structures for the Greater Yarra System - Thomson River, North South Pipeline and Victorian Desalination Plant for the next regulatory period in line with WIRO pricing principles. ${ }^{109}$ We considered the current tariff structures provide appropriate price signals about the costs of accessing each of the three main supply systems and the integrated nature of the transfer system.

Melbourne Water proposed to revise the tariff structure applied to Gippsland Water to accurately reflect the fixed cost nature of its bulk water service. Our draft decision proposed to approve this reform because it was supported by Gippsland Water and it better supports the WIRO pricing requirements in that it provides improved price signals about the fixed cost nature of the service (see the 'bulk tariffs' section of our draft decision for more detail).

[^47]
## Our final decision

We received five submissions focussing on affordability and price stability including from the Water and Sewerage Customer Council, Consumer Action Law Centre and two consumers:

- The council reiterated its preference for Melbourne Water's bulk tariffs to be stable in real terms and for a stable price path given the affordability concerns raised by residential and business customers who have been impacted by the coronavirus pandemic in the past year. ${ }^{110}$
- This is echoed by the Consumer Action Law Centre who highlights the importance of our decision on Melbourne Water's prices to the increasing number of vulnerable water customers facing financial hardship due to the coronavirus pandemic. ${ }^{111}$
- One customer also stated their preference for lower prices particularly given the current economic conditions influenced by the coronavirus pandemic. ${ }^{112}$
- Another consumer commented that Victorian water corporations should introduce a drought water pricing approach similar to New South Wales where usage charges vary dependent on water levels in reservoirs. ${ }^{113}$

On this, we consider tariff structure proposals are best dealt with by the water retailers as part of their 2023 price review.

There has been no new information following our draft decision that caused us to change our view in relation to Melbourne Water's proposed bulk water tariff structures for 2021-26.

Bulk water prices are generally slightly lower compared to Melbourne Water's price proposal due to a lower final decision revenue requirement reflecting our assessment of efficient costs under the WIRO. ${ }^{114}$

We approve the tariffs because we consider they meet the criteria in our guidance and the WIRO, including:

- the tariffs reflect the forecast efficient costs of delivering bulk water services
- the two-part structure for water tariffs will promote efficient water use, and provide customers a signal about the costs of supplying water
- the tariffs allow Melbourne Water to recover revenue to cover forecast efficient costs.

[^48]
## Bulk tariffs

## Final decision on bulk water tariffs

Our final decision approves Melbourne Water's proposed bulk water tariff structure, including its reform for Gippsland Water. Melbourne Water's revised bulk water prices for 2021-22 are set out in Table 9.1.

Approved maximum prices and price movements for the five-year period are set out in Melbourne Water's determination accompanying our final decision.

## Table 9.1 Final decision - bulk water tariffs

2020-21 \$/ ML entitlement

|  | 2020-21 <br> Approved | $2021-22$ |
| :--- | ---: | ---: |
| 1.1 Bulk water headworks charges - Greater Yarra <br> System - Thomson River | 362.46 | 317.65 |
| 1.2 Bulk water headworks charges - Victorian <br> Desalination Plant | $3,445.17$ | $3,517.43$ |
| 1.3 Victorian Desalination Plant Water Order charge | Actual cost | $613.76^{*}$ |
| 1.4 Bulk water headworks charges - North South Pipeline | 490.89 | 467.83 |
| 1.5 Bulk water usage charges -Transfer (\$/ ML) | 254.24 | 244.72 |
| 1.6 Bulk water transfer charge - Gippsland Water (\$/ ML) | 400.15 | N/A |
| Bulk water headworks charge - Gippsland Water (\$/ <br> month) | $1,337.74$ | $3,329.78$ |
| *The Victorian Desalination Plant Water Order charge for 2021-22 is in nominal dollars as determined by the <br> Department of Environment, Land, Water and Planning. |  |  |

### 9.2. Melbourne Water's bulk sewerage tariffs

## Our draft decision

Our draft decision accepted Melbourne Water's proposal to retain its existing separate bulk sewerage tariff structures at the Eastern and Western treatment plants, which are:

- fixed bulk sewerage service charges ( $\$ /$ month)
- variable transfer and treatment charges ( $\$ /$ megalitre)
- variable load charges for disposal of biological oxygen demand (BOD), total suspended solids (TSS) and total kjeldahl nitrogen (TKN) (\$/tonne)
- a load charge for the disposal of inorganic total dissolved solids (iTDS) at the Western treatment plant (\$/tonne).


## Bulk tariffs

We commended Melbourne Water's approach to revise its variable bulk sewerage tariffs at the beginning of the regulatory period to reflect short or long run marginal costs because this sends strong pricing signals to retailers and some end-use customers and is consistent with the tariff principles in our guidance. We also proposed to accept Melbourne Water's bulk sewerage tariffs subject to Melbourne Water revising its tariffs from an updated long run marginal cost (LRMC) in line with revised demand and expenditure forecasts.

## Melbourne Water's response to our draft decision

Melbourne Water submitted revised sewerage tariffs to reflect its lower sewerage revenue requirements. For the sewerage transfer charge, Melbourne Water recalculated the short run marginal cost estimates using revised sewerage transfer flow forecasts based on the top-down 'extended downturn' population scenario whilst maintaining its original forecasts for maintenance and energy operating costs. Melbourne Water argues these costs do not vary with the volume of water transferred. This resulted in sewerage transfer charges 2.6 per cent higher compared to Melbourne Water's price submission.

Melbourne Water advised in their response to an information request that updating its LRMC models would require revising growth-driven capital and operating expenditure forecasts under five raw sewage flow and load scenarios - a base scenario, plus four scenarios with a perturbation ( $5 \%$ increase) in each of the four treatable parameters (sewerage transfer, BOD, TSS and TKN). Melbourne Water advised that a full update of the LRMC models would be a labour-intensive and time-consuming process. Melbourne Water instead undertook a simplified top-down update to models, in which a three year pause in the level of demand forecasts and growth-related expenditure was introduced at the start of the 2021-22 regulatory year. Overall, Melbourne Water estimated the revised variable tariffs were at least 18 per cent lower than those in its price submission.

## Our final decision

We note that the approach used by Melbourne Water to address the impact of the lower demand forecasts and lower expenditure forecasts in our draft decision is likely to overstate the LRMC estimates. We acknowledge the complexity of re-evaluating the input parameters of the sewerage LRMC models. Using a top-down adjustment factor in the LRMC models creates a lack of consistency between the load forecasts used for tariff setting and the forecasts for estimating sewerage costs for each retailer. Overall, we consider Melbourne Water's bulk sewerage tariff structures satisfy clause 11 of the WIRO, as required by our guidance, because it provides signals to customers about the efficient cost of providing the bulk sewerage services.

Therefore, we propose to approve Melbourne Water's approach to revising its variable sewerage charges.

We expect Melbourne Water to undertake a more comprehensive review of its trade waste load and treatment forecasts as well as a re-optimisation of its sewerage capital augmentation plans in its price submission for the 2026 price review. We note in Melbourne Water's engagement with the urban retailers on the sewerage LRMC that that there has been insufficient information around the LRMC estimates and key assumptions underpinning inputs and the model. ${ }^{115}$

We encourage Melbourne Water to work more closely with the retailers to ensure that historical loads and forecasts are adequately reflected in Melbourne Water's loads at the treatment plant level. We expect Melbourne Water to work with the retailers to assess the proposal to move from the current nutrient metrics (eg from TDS to sodium, BOD to COD). ${ }^{116}$ This appears to be consistent with Melbourne Water's claim that COD is considered to be a superior cost driver than BOD and potentially more suitable as a treatable parameter for pricing purposes. ${ }^{117}$

## Final decision on bulk sewerage tariffs

Our final decision on Melbourne Water's bulk sewage treatment, transfer and sewerage load tariffs for 2021-22 is set out in 9.2 and 9.3. Approved maximum prices for bulk sewerage services applying to the urban retailers are set out in Melbourne Water's determination in Schedule 2.

[^49]
## Bulk tariffs

Table 9.2 Final decision on Melbourne Water's bulk sewerage tariffs
2020-21 \$/ML and \$/month

|  | 2020-21 | 2021-22 |
| :---: | :---: | :---: |
| Bulk sewerage variable charge - treatment (\$/ML) |  |  |
| Western System | 293.29 | 59.90 |
| Eastern System | 78.79 | 39.30 |
| Bulk sewerage variable charge - transfer (\$/ML) |  |  |
| Western System | 40.12 | 40.05 |
| Eastern System | 5.73 | 5.72 |
| Bulk sewerage load fixed charge - (\$/month) |  |  |
| City West Water | 5,695,720.90 | 5,695,720.90 |
| South East Water | 13,272,465.44 | 13,272,465.44 |
| Yarra Valley Water | 11,367,598.70 | 11,367,598.70 |

Source: Melbourne Water Price Review Model

Table 9.3 Final decision on Melbourne Water's load tariffs
2020-21 \$/tonne

|  | $2020-21$ |
| :--- | ---: |
| Western Treatment Plant |  |
| Biological oxygen demand | 195.20 |
| Suspended solids | 113.40 |
| Total Kjeldahl nitrogen | 269.58 |
| Inorganic total dissolved solids | 31.96 |
|  |  |
| Eastern Treatment Plant |  |
| Biological oxygen demand | 367.118 .30 |
| Suspended solids | 603.68 |
| Total Kjeldahl nitrogen | 210.34 |

### 9.3. Bulk tariff reform

In our draft decision, we noted Melbourne Water's commitment to water retailers to undertake a review of the cost allocation and design of bulk water and sewerage tariff structures during the 2021-26 regulatory period in order for the retailers to implement them in time for their 2023 water price review. A submission to our draft decision by the Water and Sewerage Customer Council also supports Melbourne Water's commitment to undertake a tariff review. ${ }^{188}$ We consider that a major tariff reform should have been undertaken and completed prior to Melbourne Water's pricing submission for us to assess during the price review process and not during its regulatory period.

We also note in Melbourne Water's pricing submission that retailers would like Melbourne Water to consider a careful and staged introduction of new customer contributions charging for Melbourne Water's bulk water and sewerage growth expenditure that would be partly funded by developers instead of all existing customers. ${ }^{119}$ We encourage Melbourne Water to engage with the retailers in planning for the design or introduction of a new customer contribution during the regulatory period. Overall, we expect Melbourne Water to undertake and complete any review ahead of the development of its price submission for 2026.

[^50]
## Bulk tariffs

## 10.Waterways and drainage, diversions, and miscellaneous services

This chapter sets out our final decision on Melbourne Water's proposed waterways and drainage tariff, diversions tariff structures and miscellaneous tariffs.

### 10.1. Waterways and drainage tariffs

Melbourne Water provides waterways, drainage and floodplain management services in the Port Phillip and Westernport region. It administers programs to improve the health of rivers and creeks, improve stormwater quality, and maintain drainage infrastructure to service urban growth and provide flood protection. Waterways and drainage tariffs are collected from all rateable residential and non-residential properties within Melbourne Water's Waterways Management District.

## Our draft decision

Our draft decision proposed to approve Melbourne Water's proposed waterways and drainage tariff structure for residential and rural customers, including extending the transition to a single cost reflective tariff for customers of Koo Wee Rup-Longwarry.

Our draft decision also raised concern with Melbourne Water's rate of transitioning non-residential customers on property-based tariffs to a fixed charge. We requested Melbourne Water revise its waterways and drainage tariff for non-residential customers and progress to a more cost reflective charge. We also requested Melbourne Water revise the Quiet Lakes bore flushing price to reflect the benchmark electricity price applied to the total electricity cost allowance and anticipated consumption. In addition, our draft decision requested Melbourne Water to provide more transparency on the actual prices Melbourne Water will charge to Koo Wee Rup-Longwarry up until it enhances its flood protection service level.

## Melbourne Water's response to our draft decision

In response to our draft decision, Melbourne Water accepted most elements of our draft decision on waterways and drainage tariffs, including revisiting the Quiet Lakes price to reflect the benchmark electricity price consistent with our expenditure assessment (refer to Chapter 5).

Melbourne Water provided greater transparency for Koo-We Rup-Longwarry prices, stating that price levels will remain unchanged until customers indicate their willingness to pay for enhancement in flood protection services provided by Melbourne Water.

## Our final decision

Our 2016 final decision expected Melbourne Water to transition the remaining customers on property-based non-residential waterways and drainage tariffs to a more cost reflective rate or to a flat charge by the end of the next regulatory period. ${ }^{120}$ In Melbourne Water's 2021 price submission we noted a slow transitioning of non-residential customers to a more cost reflective tariff, and we raised this issue in our draft decision. However, Melbourne Water has not addressed this issue in its response to our draft decision.

In response to a request for further information, Melbourne Water provided us with the number of customers on property-based charges per year (see Table 10.1), noting that about 20 per cent of non-residential customers will still pay a property-based fee in 2021-22. This forecast suggests that around 14,651 customers ( 8 per cent) will remain on this tariff by the end of 2025-26, which is a higher number compared to Melbourne Water's commitment in our 2016 final decision. ${ }^{121}$

Table 10.1 Number of non-residential customers on property-based charge

|  | 2021-22 | 2022-23 | 2023-24 | 2024-25 | 2025-26 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Above minimum (i.e. on <br> property based charge) | 33,863 | 30,069 | 25,196 | 19,854 | 14,651 |
| On minimum fee | 130,511 | 137,058 | 143,962 | 152,710 | 161,419 |
| Total non-residential <br> customers | 164,374 | 167,126 | 169,158 | 172,564 | 176,070 |

We remain concerned that Melbourne Water is not adopting a faster rate of transition, as we consider the reforms will lead to more cost reflective pricing, which has benefits in terms of promoting efficient investments in water management

Also, Melbourne Water has not outlined how it assisted non-residential customers particularly small and medium size businesses, who may have had difficulty paying for its waterways and drainage charges due to the coronavirus pandemic.

We received a submission from the Urban Development Industry of Australia Victoria (UDIA Victoria). UDIA does not support Melbourne Water's proposal to increase the waterways and drainage charge by 5 per cent during the consultation process. It considered the basis for the price increase was unclear.

[^51]Melbourne Water has revised its proposal in response to our draft decision and its revised waterways and drainage tariffs remains generally flat for the 2021-26 regulatory period

## Final decision on waterways and drainage tariffs

Our final decision approves Melbourne Water's waterways and drainage tariff structures for residential and rural customers, including the extended transition to a single cost-reflective tariff for customers of Koo Wee Rup-Longwarry.

Our final decision also approves Melbourne Water's updated charge for Patterson Lakes, Quiet Lakes customers of $\$ 127$ per household per year. ${ }^{122}$

Our final decision approves Melbourne Water's decision to maintain the current waterways and drainage prices until the customers indicate their ability and willingness to pay for a higher service level. The maximum prices and the proposed actual charge are set out in our final determination.

The approved prices and movements are set out in the commission's final determination, which reflects our final decision on Melbourne Water's revenue requirement.

### 10.2. Diversion services tariffs

Melbourne Water provides diversion services to customers who access water from waterways such as rivers, streams or dams. Diversion customers are generally charged a licence service fee and a volume charge. We regulate Melbourne Water's tariffs according to the WIRO's pricing principles.

## Our draft decision

In our draft decision we proposed to approve Melbourne Water's proposed diversion tariffs because it continues with existing arrangements, promotes cost reflectivity and complies with the WIRO pricing principles.

Melbourne Water did not propose any changes to diversions services tariffs in its response to our draft decision. We did not receive any submissions on diversions services tariffs in response to our draft decision.

[^52]
## Our final decision

Our final decision is to maintain our draft decision to approve Melbourne Water's proposed diversion tariffs because it proposes to continue with existing arrangements, promotes cost reflectivity and complies with the WIRO pricing principles.

Approved prices and movements are set out in the commission's final determination, which reflects our final decision on Melbourne Water's revenue requirement.

### 10.3. Miscellaneous services

Melbourne Water currently provides a range of miscellaneous services to retail water companies, developers and the general public. Miscellaneous service tariffs must reflect the actual cost of providing the services. ${ }^{123}$

## Our draft decision

We proposed to approve the level of its miscellaneous service charges proposed by Melbourne Water over the regulatory period as Melbourne Water verified these to be cost reflective and it has consulted with representatives of main applicants for miscellaneous services on the proposed changes to tariff levels. ${ }^{124}$

## Melbourne Water's response to our draft decision

Melbourne Water revised some tariffs in 2021-22 to reflect our draft decision weighted average cost of capital and forecast growth rate for operating expenditure underlying miscellaneous service tariff calculations. ${ }^{125}$ Accordingly, charges for property information statements in 2021-22 will increase by 2.6 per cent and charges for flood level certificates by 2.7 per cent compared to the original price submission while charges for the provision of hydrological data will fall in 2021-22. ${ }^{126}$

## Our final decision

Overall, miscellaneous services revenue requirement across the 2021-26 regulatory period is lower compared to Melbourne Water's price submission and prices are generally flat or falling in real terms. We confirmed with Melbourne Water that the revised prices are cost reflective.

[^53]
## Final decision on miscellaneous service charges

Our final decision approves Melbourne Water's proposed changes to the level of its miscellaneous charges over the 2021-26 regulatory period as they are cost reflective and reflects our pricing principles.

Approved prices and movements for miscellaneous services are set out in the commission's final determination, which reflects our final decision on Melbourne Water's revenue requirement.

## 11.Developer charges

Developers pay Melbourne Water for the capital investment for drainage and waterway services on undeveloped land (which is usually on the urban fringe). Developer charges are also known as 'new customer contributions'.

In our draft decision, we proposed to approve Melbourne Water's amended pricing principles for developer charges because they better meet the WIRO principles. We emphasised that Melbourne Water should ensure that a pre-tax real discount rate (proxied by the real weighted average cost of capital) be used in net present value calculations in the pricing models for drainage service schemes.

We received a submission from the Urban Development Industry of Australia Victorian Division that advocates for greater transparency regarding the design of drainage services schemes, the associated pricing of the drainage schemes, and the implementation of the drainage schemes. ${ }^{127}$ It is interested in how Melbourne Water calculates the per hectare charges for the hydraulic and water treatment aspects given the property developers fully fund it. Urban Development Industry of Australia also calls for Melbourne Water to be involved in early stages of a Precinct Structure Plan design to identify drainage asset requirements and avoid delays in provision of drainage service scheme assets to meet demand in growth areas. We encourage Melbourne Water to respond to the above feedback.

We have not received any submissions that oppose Melbourne Water's proposed pricing principles in our draft decision.

Final decision on developer contributions
Our final decision approves Melbourne Water's amended pricing principles to calculate developer charges for drainage infrastructure and stormwater quality for 2021-22 to 2025-26

[^54]
## Developer charges

## 12.Form of price control and adjusting prices

This chapter sets out our final decision on Melbourne Water's proposed form of price control and annual price adjustment mechanisms that may apply during 2021-26. Currently, Melbourne Water uses price adjustments to account for:

- uncertain and unforeseen events
- differences between forecast and actual desalination costs (covering desalination security payments and the cost of any water ordered)
- a pass through of changes in some costs (such as taxes) during the regulatory period.


### 12.1. Melbourne Water's form of price control

## Our draft decision

Our draft decision accepted Melbourne Water's proposal to retain a price cap form of price control. We considered that a price cap provides customers with price certainty and means the bulk water and sewerage supply is managing demand risk on behalf of its customers. We also considered demand risk is more efficiently managed by a water corporation, rather than its customers.

## Our final decision

No other new considerations on the form of price control were raised in response to our draft decision. We accept Melbourne Water's reasons for maintaining a price cap, and our final decision approves Melbourne Water's proposed price cap form of price control.

We consider it appropriate that Melbourne Water has some flexibility to adjust its tariffs from the path set out in its determination, particularly given the current environment. Our determination allows Melbourne Water to apply to us to change to a tariff basket form of price control within its regulatory period. A tariff basket provides flexibility for a water corporation to adjust tariffs annually from their previously determined path (within certain constraints). An application by Melbourne Water to change to a tariff basket would require consultation with its customers.

Final decision on form of price control
Our final decision approves a price cap form of price control for Melbourne's water, sewerage, and waterways and drainage services.

### 12.2. Melbourne Water's approach to adjusting prices

## Our draft decision

Our draft decision accepted Melbourne Water's proposal for:

- its existing uncertain and unforeseen events mechanism
- its existing definition of uncertain and unforeseen events mechanism
- the current pass-through mechanism for the Victorian Desalination Plant security cost payments
- the current pass-through mechanism for the cost of Victorian Desalination Plant water orders, as set by the Department of Environment, Land, Water and Planning
- the current annual update to the cost of debt

We proposed to approve these mechanisms because they reflect a continuation of current arrangements, and they are consistent with the efficiency objectives in the WIRO. No submissions responding to our draft decision raised matters that caused us to change our view on the existing adjustment mechanisms. We consider it appropriate to maintain the views we expressed in our draft decision and as such, our final decision accepts the above adjustment mechanisms.

Our draft decision did not approve Melbourne Water's proposal to recover the forgone hydroelectric revenue at Cardinia power plant because Melbourne Water did not propose a transparent and robust methodology as required by the WIRO. While we accepted that it was reasonable for Melbourne to recover the pumping costs incurred, we did not accept Melbourne Water's proposed offset mechanism to recover those costs as Melbourne Water would not have a full year of actual pumping costs and some costs would be estimated for inclusion in the forthcoming financial year's tariffs. We recommended Melbourne Water propose a transparent mechanism to ensure only actual costs are recovered so water tariffs are cost reflective.

## Melbourne Water's response to our draft decision

In response to our draft decision, Melbourne Water proposes to withdraw its proposal to recover the revenue forgone from hydro-electric generation. It has decided to redevelop it for submission at the next price review after considering the operational data collected and undertaking scenario modelling.

Regarding the pass-through mechanism for the pumping costs, Melbourne Water proposes that only actual costs incurred in year $t-1$ be recovered in year $t$. The remaining pumping costs from
year $t-1$ would be the subject of a true up adjustment in year $t+1$. For simplicity, Melbourne Water agrees to forgo any time value adjustments. ${ }^{128}$

Melbourne Water proposes to recover the following pumping costs as part of the annual tariff approval process:

- Actual electricity costs derived by multiplying the electricity consumption by the benchmark efficient electricity cost (adjusted for inflation). This ensures that the cost passed on to customers is consistent with the treatment of other electricity costs.
- Mechanical and electrical asset maintenance costs associated with pumping.
- Chemical costs savings from not having to use fluosilicic acid at Silvan and Cardinia Reservoir.

Melbourne Water proposes an offset mechanism to recover the costs of pumping desalinated water from Cardinia to Silvan in the next two years.

Melbourne Water's response to our draft decision noted its earlier suggestion (included in correspondence from Melbourne Water to the commission in December 2020) that it could implement a mechanism to adjust prices during the regulatory period, if it is unable to deliver capital expenditure above $\$ 100$ million in any year.

## Our final decision

We approve Melbourne Water's proposal to recover pumping costs. We also approve the offset mechanism that allows Melbourne Water to propose to recover the costs of pumping desalinated water from Cardinia to Silvan in the next two years. ${ }^{129}$ We consider that this approach is consistent with the approach of other water corporations and is consistent with efficiency objectives of the WIRO.

We acknowledge the initiative by Melbourne Water to mitigate capital program delivery risk to its customers, but we do not consider it is appropriate to include an adjustment mechanism in the determination. This mainly reflects the often 'lumpy' nature of capital expenditure.

We also note that we expect all water corporations to review their funding requirements and consider the opportunities to pass back any benefits of lower capital expenditure to customers, or alternatively, implement other initiatives that add to customer value. Such an approach does not necessarily require an adjustment mechanism to be embedded into a determination.

[^55]
## Final decision on form of price control

We accept Melbourne Water's annual price adjustment mechanisms for the costs associated with the Victorian Desalination Plant water order, contract cost changes and annual update to the weighted average cost of capital because Melbourne Water proposes to continue with current mechanisms that have worked well in the past. ${ }^{130}$

We accept and outline Melbourne Water's pass-through mechanism for actual pumping costs associated with the execution of the Victorian Desalination water order, with actual costs recovered in the following year and residual actual costs trued-up two years later, adjusted for inflation.

[^56]
## 13.PREMO rating

PREMO is an incentive mechanism that links the return on equity to a water corporation's level of ambition in delivering value to its customers.

For the 2021 price review, we required Melbourne Water to rate its price submission as 'Leading', 'Advanced', 'Standard’ or 'Basic'. The rating is based on an assessment against the Risk, Engagement, Management and Outcomes elements of PREMO. A 'Leading' price submission is allowed the highest return on equity, and a 'Basic' the lowest.

The assessment tool included in our guidance directs Melbourne Water to consider its level of ambition in relation to matters covered in its price submission, such as proposals related to operating and capital expenditure, customer engagement and tariffs.

In Section 7.3, we noted our final decision is to adopt a return on equity of 4.2 per cent, consistent with our draft decision, based on our PREMO review.

### 13.1. Our review of Melbourne Water's PREMO rating

Melbourne Water's proposed PREMO rating for its price submission, and our draft and final decision are summarised in Table 13.1.

Table 13.1 PREMO rating

|  | Overall <br> PREMO rating | Risk | Engagement | Management | Outcomes |
| :--- | :---: | :--- | :--- | :--- | :--- |
| Melbourne <br> Water's rating | Advanced | Advanced | Advanced | Advanced | Advanced |
| Commission's <br> draft decision <br> rating | Standard | Standard | Standard | Standard | Standard |
| Commission's <br> final decision <br> rating | Standard | Standard | Standard | Standard | Standard |

Our draft decision did not agree with Melbourne Water's overall rating of 'Advanced' and its rating of 'Advanced' for each of the four individual PREMO elements. We considered each of Melbourne Water's claims in support of its 'Advanced' rating against our PREMO assessment tool guidelines, and against various 'Advanced'-rated proposals from other water corporations from our 2018 water price review. Our draft decision stated that Melbourne Water's price submission had clearly met the requirements for a 'Standard' rating, which is a good outcome for customers, but it had not shown how its price submission had provided significantly improved value for customers or how it
outperformed other water corporations. Accordingly, we rated each element as 'Standard' with a corresponding overall PREMO rating of 'Standard'.

In its response to our draft decision, Melbourne Water contended that its approach was in line with an 'Advanced' rating and requested we amend our PREMO assessment of its price submission. Specifically, Melbourne Water disagreed with our application of the PREMO assessment framework, and with our ratings and supporting statements. Melbourne Water's reasons are set out at pages 16 to 45 of its response to our draft decision.

Having considered Melbourne Water's reasons, and for the reasons provided below, this final decision confirms our earlier draft decision to give Melbourne Water's price submission an overall rating of 'Standard'.

## Melbourne Water's response to our draft decision on PREMO and our final decision

In its response to our draft decision, Melbourne Water disagreed with our revised 'Standard' PREMO rating and raised a number of material matters for our consideration. Among other things:

- It expressed concern that its price submission 'had been assessed against PREMO standards that had not previously been outlined by the ESC in either its original or additional guidance material' (page 3 of its response) and that we did not 'state that Melbourne Water's response to the pandemic would materially impact its PREMO assessment' (page 18).
- It did not agree with 'the assertion in the draft decision that its submission did not adequately demonstrate customer value, or did not do enough for customers in respect of risks associated with the pandemic' (page 8).
- It suggested the commission's draft decision 'selectively focused on specific issues that support its downgrading' (page 17), and that we 'cherry-picked' examples of other water corporations' PREMO ratings to support our decision (page 18).
- It claimed that it had not been provided with an opportunity to respond to:
- information obtained by Deloitte in its expenditure review which Melbourne Water submitted influenced our decision on the Engagement element of PREMO (page 22)
- claimed inconsistencies in its submission which Melbourne Water submits influenced our decision on the Management element of PREMO (page 43).

In addition to these overarching matters, Melbourne Water contests our assessment and rating for each of the four PREMO elements, and challenged selected statements we had made in support of our PREMO rating downgrade for each.

In assessing the PREMO rating for Melbourne Water's submission, we applied the approach as outlined in Melbourne Water's guidance paper and the additional guidance, which involved a holistic assessment of the price submission against the criteria in the original guidance paper and supplemented by the additional guidance from August 2020.

This guidance largely reflected our previous approach to PREMO, being modified to:

- Take into account any need to refine or amend the approach to reflect the nature of Melbourne Water, the services it delivers and its customers - these updates occurred following targeted consultation in September 2019, including with Melbourne Water.
- Include a requirement that the supporting information that Melbourne Water provided for each of the elements of its PREMO rating would take into account where relevant the impact of the coronavirus. ${ }^{131}$

In relation to our overall PREMO rating:

- Our view is that the outcomes Melbourne Water committed to in its price submission would result in Melburnians receiving high quality drinking water, safe treatment and disposal of sewage, and new investment in waterways and drainage. These outcomes are consistent with what we would expect from all water corporations and therefore meet the requirements of a 'Standard' rated price submission.
- Melbourne Water claimed an 'Advanced' rating, and set out a list of reasons to support this claim for each of the four PREMO elements. Once we were satisfied that Melbourne Water had largely met the requirements for a 'Standard' rating, our PREMO review focused on each of these stated claims, drawing on our assessment against the guidance criteria, the PREMO assessment tool, and our experience with previous PREMO assessments. ${ }^{132}$
- While aspects of Melbourne Water's proposal demonstrated good processes and commitments, we also had concerns about specific aspects of its price submission that were relevant to the commission's overall assessment, including:
- Its response to increased uncertainty for demand and capital expenditure forecasting in light of the pandemic.
- The level of influence on its price submission proposals afforded through the customer engagement program.
- Inconsistencies between the written submission and the financial model, and compliance with our guidance in some areas
- Demonstration of a significant improvement in customer value.

[^57]- However, after undertaking a holistic assessment of Melbourne Water's submission, we are not satisfied that Melbourne Water had challenged itself to deliver a step change in value in the way we expect to see in an 'Advanced' rated price submission.

On the matters in which Melbourne Water claimed that it had not been provided an opportunity to respond to, we note the following:

- Our assessment of the engagement element was not based solely on the findings of our expenditure consultant Deloitte, but drew heavily from information and material provided directly to us by Melbourne Water, as discussed in Chapter 2. In addition, Melbourne Water was provided with Deloitte's draft report, and was therefore afforded an opportunity to respond to Deloitte's findings and provide any further information as to why it did not consider those findings to be correct.

All the inconsistencies we found in Melbourne Water's price submission were provided to Melbourne Water through discussion or follow-up requests for further information to clarify or correct where required prior to our draft decision. This is standard practice to complete our assessment and financial modelling ahead of making our draft decision. In its response to our draft decision, Melbourne Water has not provided us with new information that has led to us changing our view and rating on any of the individual PREMO elements.

Where relevant, we have elaborated below on our draft decision reasoning and any new information in support of our PREMO rating for each element.

### 13.2. Risk

Our draft decision approved a 'Standard' rating for the Risk element of PREMO. Melbourne Water proposed an 'Advanced’ rating.

Our PREMO framework requires a water corporation's Risk rating to consider the extent it has demonstrated a robust process for identifying risk, and how it has decided who should bear these risks. We considered Melbourne Water's proposals demonstrated it had largely met the requirements expected of all water corporations and associated with a 'Standard' rating.

However, we did not consider Melbourne Water had demonstrated how its management of risk had justified the 'Advanced' rating it proposed. In particular, we considered its response to the pandemic did not adequately address the significant increase in uncertainty, particularly the impact of reduced population growth on its expenditure forecasts.

We acknowledged Melbourne Water's proposed capital expenditure smoothing, to defer recovery of some revenue from the first two years into the later years to reflect timing uncertainty. While this went some way to addressing movements within the regulatory period, there was no allowance for planned expenditure that may be deferred beyond the regulatory period - something we
considered quite likely given the prolonged nature of the pandemic. Melbourne Water did explore options to return unrequired capital revenue to customers through a price adjustment mechanism in a subsequent letter to us. However, we considered a more appropriate customer protection was to reduce the expenditure allowance in the first instance, and our draft decision proposed to reduce the capital expenditure benchmark allowance by $\$ 50$ million per year to address this likely risk.

In its response to our draft decision, Melbourne Water accepted the $\$ 250$ million adjustment to its capital benchmark, but claimed that given the revenue saving was about the same as its capital smoothing, it amounted to a double-up and it withdrew the capital smoothing. In our view, this is not a double-up because they address two different risks - expenditure movements within the regulatory period, and movements beyond. We considered increasing our proposed reduction in response to Melbourne Water's approach, but on review of all the material before us we considered that the capital allowance that we propose to approve is appropriate in all of the circumstances and a further reduction is not justified. We expect Melbourne Water will provide a comprehensive report each year to its customers to account for its capital expenditure and demonstrate how actual expenditure has played out against its forecasts. This will form a key component of Melbourne Water's Performance rating at the next price review, and we will watch this with great interest.

Melbourne Water has provided no new evidence to change our draft decision on its Risk rating. In fact, Melbourne Water's withdrawal of its capital smoothing adjustment removes the layer of customer protection it had originally proposed, and increases the cost risk to customers compared with our draft decision.

Our final decision confirms a 'Standard' rating for the Risk element of PREMO.

### 13.3. Engagement

We have considered all information provided by Melbourne Water and other stakeholders. We received no new information that caused us to change our draft decision on Melbourne Water's Engagement rating. Our final decision confirms a 'Standard' rating for the Engagement element of PREMO.

We consider that Melbourne Water's engagement program was a significant improvement from its 2016 price review, a view shared by Melbourne Water's stakeholders including its two customer councils established to test strategic ideas and provide advice on key issues. Its engagement program included a variety of engagement methods which Melbourne Water justified as being fit for purpose given the content and circumstances facing the business and its customers. This included the use of deliberative processes to set outcomes, refine performance measures and retest some of its positions and proposals.

However, for a submission to receive an 'Advanced' rating for engagement under our PREMO framework, we would expect to see a closer alignment between Melbourne Water's proposals and the preferences and interests elicited in its engagement program, as well as feedback that it has delivered on engagement commitments. ${ }^{133}$

Three stakeholder submissions to our draft decision questioned the level of influence on some positions and proposals, despite sometimes lengthy and detailed consultations processes.

- Written material between Melbourne Water and the Water and Sewerage Customer Council members made reference to the 'difference between participation and genuine influence' and made recommendations for future engagement. ${ }^{134}$
- The Urban Development Industry of Australia, Victoria Division made reference to the lack of clarity of the process, and that the reason for some proposals were not clearly established. ${ }^{135}$
- The Consumer Action Law Centre identified discrepancies between commitments made in discussions with it, and what was included in the final submission.

Feedback of this nature, particularly from stakeholders highly representative of broader community views, is not consistent with an 'Advanced' engagement rating. ${ }^{136}$

Our framework requires a water corporation to explain in its submission any inconsistencies between proposals and the views of end-user and retailer customer views. For an 'Advanced' rating, we would expect to see divergent views and proposals of the nature described by Melbourne Water stakeholders fully resolved and addressed between a water corporation and its stakeholders prior to a submission being made to us. ${ }^{137}$ We would not expect these to be revealed during the price review process as was the case with Melbourne Water.

Our final decision confirms a 'Standard' rating for the Engagement element of PREMO.

### 13.4. Management

Our draft decision approved a 'Standard' rating for the Management element of PREMO. Melbourne Water proposed an 'Advanced' rating.

[^58]Melbourne Water's price submission showed strong support and ownership from senior management and board level, as expected under our PREMO framework. However, our draft decision proposed a lower PREMO rating noting, among other things, our concerns with:

- the demonstration of prudency and efficiency for some of its expenditure forecasts
- the efficiency improvement rate for operating expenditure
- inconsistencies in its demand forecasts
- its proposal to capitalise an excessive amount of the desalination plant payments
- errors and inconsistencies between its written submission and the financial model.

We also noted that some of Melbourne Water's claims in support of its proposed 'Advanced' rating reflected our expectations of a 'Standard' rating - robust challenging of its capital program which resulted in the exclusion of $\$ 498$ million of further possible projects, for example.

In response to our draft decision, Melbourne Water has addressed some of these matters, including:

- It provided new information to support the prudency and efficiency of some of the expenditure our draft decision proposed to remove for pricing purposes. We have reinstated the excluded operating expenditure for waterways and drainage, and the capital expenditure reduction for one major project.
- It revised its demand forecasts to better reflect the latest population growth projections.
- It accepted our revised allowance for capitalisation of desalination payments, consistent with our guidance and previous pricing decisions.

However, we also note its response:

- included further errors and inconsistencies between the written submission and the financial model
- did not address a number of matters we specifically requested in our draft decision, for example:
- It did not provide updated operating expenditure growth forecasts, opting instead to accept our draft decision values, which were notional 'proxies' for the purposes of establishing a draft decision revenue requirement.
- It did not provide a clear justification for its proposed relationship between customer growth and expenditure growth across both business areas (page 28 of our draft decision).
- It did not clarify why it slowed down the rate of transitioning of non-residential waterways and drainage customers to a more cost reflective tariff.

Melbourne Water has provided no new evidence to change our draft decision on its Management rating.

Our final decision confirms a 'Standard' rating for the Management element of PREMO.

### 13.5. Outcomes

Our draft decision approved a 'Standard' rating for the Outcome element of PREMO. Melbourne Water proposed an 'Advanced' rating.

We noted Melbourne Water had developed its set of outcomes and associated measures and targets through its customer engagement processes, as required under our PREMO framework and in accordance with our guidance. However, we did not consider Melbourne Water's proposal reflected a significant improvement in customer value, as expected for an 'Advanced' rating and stipulated in our guidance.

In response to our draft decision, Melbourne Water noted its customers did not request an increase in performance level, and it had not set higher targets or more challenging thresholds due to the additional costs required to deliver a service level higher than customers wanted.

A key requirement for an 'Advanced' rating is to demonstrate a 'significant improvement' in customer value. This could be either a significant increase in level of service for a similar price, or a similar level of service at a significantly reduced price, for example. Melbourne Water's price submission did not demonstrate either of these scenarios, despite its claim of 'Advanced' for Outcomes. Delivering a similar level of service (which is, as it states, what its customers wanted) at a similar price is consistent with a 'Standard' rating.

Melbourne Water has provided no new evidence to change our draft decision on its Outcomes rating.

Our final decision confirms a 'Standard' rating for the Outcomes element of PREMO.

### 13.6. Melbourne Water may apply for a higher return on equity during the regulatory period

While we have retained our draft decision rating of Melbourne Water's price submission as 'Standard', Melbourne Water is able to apply to the commission during the regulatory period for a review of its return on equity allowance. The scope of the review would be to consider whether to increase the return on equity allowance from the 4.2 per cent adopted in our final decision to 4.5 per cent which reflects the full allowance for a 'Standard' price submission.

Melbourne Water must notify us of any intention to apply for a reassessment of its return on equity at least 12 months before it lodges an application. This will enable us to provide it with guidance on our information requirements for such a review. However, we expect that any application would include details of customer outcomes over at least the first two years of the regulatory period.

In making our decision, we would take into account the interests of customers and other considerations listed in the Water Industry Regulatory Order.

Any application by Melbourne Water would need to provide sufficient information to allow the commission to verify that any proposed adjustment would comply with the Water Industry Regulatory Order, and provide other information required by any guidance issued by the commission in relation to the review. This review would be conducted in a public process and stakeholders that might be affected by the decision would have an opportunity to respond to Melbourne Water's application.

We consider that allowing Melbourne Water to apply for a reinstatement of the full return on equity allowance for a 'Standard' price submission in the present circumstances is in the interests of Victorian water customers and consistent with the requirements of the Water Industry Regulatory Order. This is principally because the commission considers that the possibility of a re-rating will provide Melbourne Water with a further incentive to improve customer outcomes during the forthcoming regulatory period. In addition, we note that Melbourne Water's price submission was prepared during the uncertainty created by the pandemic and a re-assessment after two years of the forthcoming regulatory period will provide both Melbourne Water and the commission with greater information about conditions over the course of the regulatory period than were available at the time the submission was prepared.

## Appendix A: Submissions received

| Date | Name or organisation |
| :--- | :--- |
| 5 May 2021 | Charis Cheng |
| 4 May 2021 | Anonymous |
| 4 May 2021 | Yarra Riverkeeper Association |
| 4 May 2021 | Water and Sewerage Customer Council |
| 4 May 2021 | Water and Sewerage Customer Council |
| 4 May 2021 | Newgate Research |
| 4 May 2021 | Urban Development Institute of Australia <br> (UDIA) Victoria |
| 4 May 2021 | Consumer Action Law Centre |
| 3 May 2021 | VicWater |
| 23 April 2021 | Ponnurajah Ranjanan |
| 28 March 2021 | Travis Ahearn |

## Appendix B: Our consideration of legal requirements

Clause 11 of the Water Industry Regulatory Order 2014 (WIRO) specifies the mandatory factors we must have regard to when making a price determination. The WIRO covers matters that are included in the Water Industry Act 1994 (WI Act) and the Essential Services Commission Act 2001 (ESC Act).

Below, we describe how we apply the mandatory factors and where we have done so in our final decision for Melbourne Water.

In addition to the mandatory factors set out below, clause 11 of the WIRO requires the commission to have regard to the matters specified in the commission's guidance. ${ }^{138} \mathrm{We}$ have had regard to the matters specified in our guidance in making our price determination. Our draft and final decisions provide further information on where we have considered our guidance, and Melbourne Water's compliance with our guidance, in making our price determination.

Note: all chapters and sections referenced below refer to our draft decision for Melbourne Water.

[^59]
## Economic efficiency and viability matters

WIRO clause 8(b)(i) requires us to have regard to the 'promotion of efficient use of prescribed services by customers'.

We consider that the efficient use of prescribed services by customers is promoted when a tariff is applied to customers benefiting from the service covered by the tariff, and tariffs send appropriate signals about efficient costs.

The following sections of our final decision involved consideration of this factor:

- Our consideration of customer engagement (see Chapter 2).
- Our assessment of the revenue requirement (see Chapter 4).
- Our assessment of efficient operating expenditure (see Chapter 5) and capital expenditure (see Chapter 6).
- Our assessment of tariffs (see Chapters 9 and 10).

WIRO clause 8(b)(ii) requires us to have regard to the 'promotion of efficiency in regulated entities as well as efficiency in, and financial viability of, the regulated water industry'.

We consider that the delivery of outcomes which reflect customer service priorities at an efficient cost promotes efficiency in regulated entities and the water industry. Our final decision has therefore had regard to the extent that Melbourne Water has demonstrated its proposed outcomes reflect customer service priorities, and whether its tariffs and forecast costs reflect efficient levels of expenditure.

The following sections of our final decision involved consideration of this factor:

- Our consideration of customer engagement (see Chapter 2).
- Our assessment of the revenue requirement (see Chapter 4).
- Our assessment of efficient operating expenditure (see Chapter 5) and capital expenditure (see Chapter 6).
- Our assessment of tariffs (see Chapters 9 and 10).
- Our assessment of financial viability (see Chapter 7).

WIRO clause 8(b)(iii) requires us to have regard to the 'provision to regulated entities of incentives to pursue efficiency improvements'.

We consider that the delivery of outcomes which reflect customer service priorities at an efficient cost provides regulated entities incentives to pursue efficiency improvements. The following sections of our final decision involved consideration of this factor:

- Our consideration of customer engagement (see Chapter 2).
- Our consideration of outcomes (see Chapter 3).


## Appendix B

- Our assessment of the revenue requirement (see Chapter 4).
- Our assessment of efficient operating expenditure (see Chapter 5) and capital expenditure (see Chapter 6).
- Our assessment of tariffs (see Chapters 9 and 10).

Additionally, our pricing approach allows a water corporation to retain the benefits of any cost efficiencies it generates until the end of its regulatory period. In other words, a water corporation has an incentive to outperform the operating and capital expenditure benchmarks we accept for the purpose of estimating its revenue requirement and prices. This is consistent with providing incentives for water corporations to pursue efficiency improvements.

ESC Act section $8 \mathrm{~A}(1)$ (a) requires us to have regard to 'efficiency in the industry and incentives for long term investment'.

We consider that adopting forecasts of efficient expenditure that reflect the service priorities of the customers of each water corporation promotes efficiency in the water industry.

The following sections of our final decision involved consideration of this factor:

- Our consideration of customer engagement (see Chapter 2).
- Our consideration of outcomes (see Chapter 3).
- Our assessment of the revenue requirement (see Chapter 4).
- Our assessment of efficient operating expenditure (see Chapter 5) and capital expenditure (see Chapter 6).
- Our assessment of tariffs (see Chapters 9 and 10).

We have had regard to incentives for long term investment by adopting:

- A ten-year trailing average approach to estimating the benchmark cost of debt (see Section 7.3.1).
- A regulatory rate of return that we consider will enable Melbourne Water to recover costs associated with its investment in services (see Chapter 7). ${ }^{139}$

ESC Act section $8 \mathrm{~A}(1)(\mathrm{b})$ requires us to have regard to the 'financial viability of the industry'.

We consider that the financial viability of the industry is secured by approving prices that provide a high degree of certainty that each water corporation can maintain an investment grade credit rating. Further, prices should enable each corporation to generate cash flow to service financing costs arising from investments to meet service expectations.

[^60]We have had regard to this matter in Chapter 4 and Chapter 7.
ESC Act section 33(3)(b) requires us to have regard to the 'efficient costs of producing or supplying regulated goods or services and of complying with relevant legislation and relevant health, safety, environmental and social legislation applying to the regulated industry'.

In preparing our final decision, we have had regard to the extent Melbourne Water has demonstrated its forecasts reflect efficient costs to deliver services valued by customers, and to deliver on relevant legislation and relevant health, safety, environmental and social obligations.

The following sections of our final decision involved consideration of this factor:

- Our consideration of customer engagement (see Chapter 2).
- Our assessment of the revenue requirement (see Chapter 4).
- Our assessment of efficient operating expenditure (see Chapter 5) and capital expenditure (see Chapter 6).
- Our assessment of tariffs (see Chapters 9 and 10).


## Industry specific matters

ESC Act section 33(3)(a) requires us to have regard to the 'particular circumstances of the regulated industry and the prescribed goods and services for which the determination is being made'.

Our pricing approach allows each water corporation to propose outcomes, tariff structures and expenditure that reflect its particular circumstances. We consider that taking into account the particular circumstances of each water corporation is consistent with taking into account the particular circumstances of the water industry.

The following sections of our final decision involved consideration of this factor:

- Our consideration of customer engagement (see Chapter 2).
- Our consideration of outcomes (see Chapter 3).
- Our assessment of the revenue requirement (see Chapter 4).
- Our assessment of efficient operating expenditure (see Chapter 5) and capital expenditure (see Chapter 6).
- Our assessment of tariffs (see Chapters 9 and 10).

We have had regard to the prescribed services listed in the WIRO in making our decision. This includes adopting operating and capital expenditure benchmarks that we consider will allow Melbourne Water to deliver services that are covered by the prescribed services listed in the WIRO.

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ESC Act section 33(3)(c) requires us to have regard to the 'return on assets in the regulated industry'.

Our final decision provides for Melbourne Water to generate a return on assets through:

- Our consideration of the regulatory asset base (see Section 7.1).
- Our consideration of the cost of debt (see Section 7.3.1).
- Our consideration of the return on equity (see Section 7.3.3).

ESC Act Section 33(3)(d) requires us to have regard to 'any relevant interstate and international benchmarks for prices, costs and return on assets in comparable industries'.

In assessing costs, prices and return on assets we have had regard to relevant interstate benchmarks:

- indicative bills paid by customers in other jurisdictions in Australia ${ }^{140}$
- operating and capital expenditure costs per connection throughout Australia ${ }^{141}$
- tariff structures applied by water corporations throughout Australia ${ }^{142}$
- the regulatory rate of return set by other regulators. ${ }^{143}$

We are not aware of any international benchmarks that are relevant to our decision.
WI Act section 4C(b) requires us to 'ensure that regulatory decision making and regulatory processes have regard to any differences between the operating environments of regulated entities'.

Our pricing approach allows each water corporation to propose outcomes, a revenue requirement, expenditure and tariffs that reflect its particular circumstances and operating environment.

The following sections of our final decision involved consideration of this factor:

- Our consideration of customer engagement (see Chapter 2).
- Our consideration of outcomes (see Chapter 3).
- Our assessment of the revenue requirement (see Chapter 4).
- Our assessment of efficient operating expenditure (see Chapter 5) and capital expenditure (see Chapter 6).

[^61]- Our assessment of tariffs (see Chapters 9 and 10).

Our price review also considers the views of stakeholders affected by Melbourne Water's proposals, including through submissions and public meetings.

## Customer matters

ESC Act section 8(1) requires us to have regard to the fact that the 'objective of the Commission is to promote the long term interests of Victorian consumers'.

We consider that promoting efficiency in delivering outcomes that align to service priorities of customers is consistent with promoting the long term interests of Victorian consumers.

The following sections of our final decision involved consideration of this factor:

- Our consideration of customer engagement (see Chapter 2).
- Our consideration of outcomes (see Chapter 3).
- Our assessment of the revenue requirement (see Chapter 4).
- Our assessment of efficient operating expenditure (see Chapter 5) and capital expenditure (see Chapter 6).
- Our assessment of tariffs (see Chapters 9 and 10).

ESC Act Section 8(2) requires us to 'have regard to the price, quality and reliability of essential services' in seeking to achieve the objective in section 8(1) of the ESC Act.

We consider that promoting efficiency in delivering outcomes that align to service priorities of customers, and allowing corporations to meet regulatory and policy obligations is consistent with this objective.

In terms of prices, the following sections of our final decision involved consideration of this factor:

- Our consideration of the revenue requirement (see Chapter 4).
- Our assessment of efficient operating expenditure (see Chapter 5) and capital expenditure (see Chapter 6).
- Our consideration of demand (see Chapter 8).
- Our consideration of tariffs (see Chapters 9 and 10).

In terms of the quality and reliability of services, the following sections of our final decision involved consideration of this factor:

- Our consideration of customer engagement (see Chapter 2).
- Our consideration of outcomes (see Chapter 3).


## Appendix B

WIRO Clause 11(d)(i) requires us to have regard to whether Melbourne Water's prices 'enable customers or potential customers of the regulated entity to easily understand prices charged by the regulated entity for prescribed services or the manner in which such prices are calculated, determined or otherwise regulated'.

We consider that the following matters are relevant when considering whether Melbourne Water's prices enable customers or potential customers to easily understand prices, or the manner in which prices are calculated, determined or otherwise regulated:

- feedback from customers during a water corporation's engagement
- the structure of individual tariffs
- the proposed form of price control
- any changes to tariffs and how water corporations explain them to customers.

The following sections of our final decision involved consideration of this factor:

- Our consideration of the form of price control and tariffs (see Section 12.1 and Chapters 9 and 10).

WIRO Clause 11(d)(ii) requires us to have regard to whether Melbourne Water's prices 'provide signals about the efficient costs of providing prescribed services to customers while avoiding price shocks where possible'.

We consider prices can provide signals about efficient costs when a tariff is applied to customers benefiting from the service covered by the tariff, and tariffs send appropriate signals about efficient costs.

The following sections of our final decision involved consideration of this factor:

- Our consideration of customer engagement (see Chapter 2).
- Our assessment of the revenue requirement (see Chapter 4).
- Our assessment of efficient operating expenditure (see Chapter 5) and capital expenditure (see Chapter 6).
- Our assessment of tariffs (see Chapters 9 and 10).

WIRO Clause 11(d)(iii) requires us to have regard to whether Melbourne Water's prices 'take into account the interests of customers of the regulated entity, including low income and vulnerable customers'.

In considering the above factor, we had regard to:

- Melbourne Water's customer engagement, noting that affordability was one of the major priorities identified by its customers and was reflected in Melbourne Water's outcome commitment 'bills are kept as low as possible' (see Chapter 2)
- Melbourne Water's willingness to pay study, to establish customers' willingness to pay for additional investment in waterways and drainage services (see Chapter 2).


## Health, safety, environmental and social obligations

ESC Act Section 8A(1)(d) requires us to have regard to 'the relevant health, safety, environmental and social legislation applying to the industry'.

Our final decision proposes to approve a revenue requirement that will enable Melbourne Water to deliver on its legal and regulatory obligations.

The following sections of our final decision involved consideration of this factor:

- Our assessment of the revenue requirement (see Chapter 2).
- Our assessment of efficient operating expenditure (see Chapter 5) and capital expenditure (see Chapter 6).
- Our assessment of the form of price control (see Section 12.1).

WI Act section 4C(c) requires us to 'ensure that regulatory decision making has regard to the health, safety, environmental sustainability (including water conservation) and social obligations of regulated entities'.

Our final decision proposes to approve a revenue requirement that will enable Melbourne Water to deliver on its health, safety, environmental sustainability and social obligations.

The following sections of our final decision involved consideration of this factor:

- Our assessment of the revenue requirement (see Chapter 4).
- Our assessment of efficient operating expenditure (see Chapter 5) and capital expenditure (see Chapter 6).
- Our assessment of tariffs (see Chapters 9 and 10).


## Other matters

ESC Act section $8 \mathrm{~A}(1)(\mathrm{c})$ requires us to have regard to 'the degree of, and scope for, competition within the industry, including countervailing market power and information asymmetries'.

In relation to the above, Melbourne Water does not face any competition in the delivery of its prescribed services within its region. Our final decision takes this into account through our consideration of forecast efficient costs, and considering the service priorities of customers as revealed through a business's customer engagement.

The following sections of our final decision involved consideration of this factor:

## Appendix B

- Our assessment of customer engagement (see Chapter 2)
- Our assessment of outcomes (see Chapter 3)
- Our assessment of efficient operating expenditure (see Chapter 5) and capital expenditure (see Chapter 6).

We consider that our pricing approach helps to address market power and information asymmetries relating to the water corporations. Our PREMO water pricing approach provides incentives for a water corporation to provide its "best offer" to customers in its price submission. This is described in further detail in a report we released in 2016. ${ }^{144}$

ESC Act section 8A(1)(e) requires us to have regard to the 'benefits and costs of regulation (including externalities and gains from competition and efficiency) for: (i) consumers and users of products or services (including low income and vulnerable consumers); and (ii) regulated entities'.

We have had regard to benefits and costs of regulation by:

- Focusing our assessments of price submissions on the materiality of proposals to customer interests (including low income and vulnerable services), including in terms of price, bill and service impacts.
- Designing our guidance so we minimise the compliance costs for water corporations. Our guidance noted that much of the information required in price submissions should be readily available to water corporations as it would be relevant for other purposes such as corporate planning and project prioritisation and justification. ${ }^{145}$

A benchmarking study found that the cost of the commission's price reviews in the past has been lower than those of regulators in other Australian jurisdictions (after being normalised for revenue covered by price decisions). ${ }^{146}$

ESC Act section $8 \mathrm{~A}(1)(\mathrm{f})$ requires us to have regard to 'consistency in regulation between States and on a national basis'.

Similar to other state and national regulators, our economic regulatory approach:

- uses the building block method to estimate a water corporation's revenue requirement

[^62]- allows water corporations to implement various forms of price control, including price caps and revenue caps
- allows for consultation with key stakeholders during a price review, including through the release of a draft decision.


## WI Act section 4C(a) requires us to 'ensure that the costs of regulation do not exceed the benefits'.

We have sought to ensure that the costs of regulation do not exceed the benefits by:

- Implementing a price review process so that water corporations may receive streamlined price reviews if they submit a high quality price submission. This reduces the costs of regulation for water corporations and the commission.
- Focusing our assessments of price submissions on the materiality of proposals to customer interests (including low income and vulnerable services), including in terms of price, bill and service impacts.
- Designing our guidance so we minimise the compliance costs for water corporations. Our guidance noted that much of the information required in price submissions should be readily available to water corporations as it would be relevant for other purposes such as corporate planning and project prioritisation and justification.


## Appendix C: Guaranteed Service Levels

## Melbourne Water's ongoing review of its GSLs

We note Melbourne Water intends to review its GSLs annually to ensure they continue to meet business and customer objectives during the 20212026 regulatory period. In particular, Melbourne Water's intention is to consult with the retailers in the lead up to their 2023 retailer price submissions.

Difference between tables for each retailer
Back-to-back abatements to retailer customers GSLs are current GSLs offered by water businesses, however water businesses will be reimbursed by Melbourne Water where Melbourne Water has triggered the payment. There's no change at the customer level; customers still receive their payment directly from water businesses.

Additional direct retailer compensation GSLs are new GSLs agreed between Melbourne Water and water businesses to meet service standards and compensate water businesses for out-of-pocket expenses. The new GSLs encourage pro-active service supply management to avoid impact to customers.

## Material provided by Melbourne Water

Melbourne Water provided principles on page 36 of its response to our draft decision. Melbourne Water also sent us six retailer tables on the $4^{\text {th }}$ May 2021, supporting its response to our draft decision.

Melbourne Water's principles for allocating rebates to customers where it is the cause of a GSL breach
All GSLs share the following common principles:

- Alignment to end customer outcomes and retailer GSLs
- As much as possible consistent across the retailers
- GSLs are as simple as possible to measure and administer and not dependent on new processes or systems


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- Deviation from this relates to slightly different rebate values and trigger thresholds
- Any payment to end use customers as a result of MW breaching a GSL would be made by the retailer to their customer, with the retailer reimbursed by Melbourne Water
- An exception related to payments being compensated for heightened call centre costs for retailers for unplanned events and minimum notice periods for planned events not met
- Melbourne Water recognises that from time to time there are infrequent but significant events which would require additional consideration, including provision for bespoke reimbursement for such major incidents.


## Melbourne Water's GSL tables for each retailer

## Yarra Valley Water

13.1 Table D.1.1 Guaranteed service levels - Back-to-back abatements to retailer customers

| MW proposed GSL | YVW equivalent | Guiding principle for allocation to MW vs YVW | Notice periods How \& who it goes to? | Verification of incidents | Reporting What is the record \& where stored | Approach to abatement payments |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Unplanned water quality | - \$50 for 2 or more separate water quality issues in a rolling 12 months | -Proportional payment by MW (i.e., If MW causes 1 of 2 events, then MW pays $1 / 2$ * $\$ 50$ = \$25) <br> - If water quality is compliant with Bulk Water Supply Agreement then not an issue | - Changes in source water to be advised to retailer as per nominated days below ${ }^{1}$ (or less by agreement or emergency ${ }^{2}$ ) in advance of change (Control Room to Control Room) | - YVW records and quarterly notification to MW <br> - Any misalignment to be resolved by Operating Reps | - As per retailer record | - Review quarterly <br> - Rebate on monthly invoice to retailer |

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| Unplanned water service interruption | - \$50 for more than 4 hours unplanned event. <br> - \$100 for more than 12 hours unplanned event. <br> - $\$ 50$ for 3 or more unplanned events 12 months (rolling 12 months) | - Direct rebate per event <br> - Direct rebate per event <br> - Proportional payment by MW (i.e., If MW causes 1 of 3 events, then MW pays $1 / 3$ * $\$ 50$ $=\$ 16.50$ ) | - To classify as a planned water service interruption event any interruption to water service to be advised to YVW 14 days in advance or by agreement 7 days in advance (Control Room to Control Room) | - YVW records and quarterly notification to MW <br> - Any misalignment to be resolved by Operating Reps | - As per retailer record | - Review quarterly <br> - Rebate on monthly invoice to retailer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Unplanned sewer service interruption | - \$50 interruption more than 4 hours - \$100 interruption more than 12 hours - \$50 for 3 or more interruptions last 12 months (rolling 12 months) | - Direct rebate per event <br> - Direct rebate per event <br> - Proportional payment by MW (i.e., If MW causes 1 of 3 events, then MW pays $1 / 3$ * $\$ 50$ $=\$ 16.50$ ) | - To classify as a planned sewer service interruption event any interruption to sewer service to be advised to YVW 14 days in advance or by agreement 7 days in advance (Control Room to Control Room) | - YVW records and quarterly notification to MW <br> - Any misalignment to be resolved by Operating Reps | - As per retailer record | - Review quarterly <br> - Rebate on monthly invoice to retailer |
| Sewer spill (caused by system failure) | - \$1000 spill inside property for over one hour <br> - $\$ 2000$ subsequent spill inside property last 12 months for over 1 hour <br> - \$1000 uncontained | - Direct rebate per event <br> - Direct rebate per event <br> - Direct rebate per event | - N/A | - YVW records and quarterly notification to MW <br> - Any misalignment to be resolved by Operating Reps | - As per retailer record | - Review quarterly <br> - Rebate on monthly invoice to retailer |

[^63]spill on property more
than 4 hours

- Direct rebate per event uncontained spill on property for over 4 hours last 12 months
 Valley Towns (2 days)
2 Emergency event: Change required to avert significant supply disruption or water quality issue, but supply remains Bulk Water Supply Agreement compliant.

Table D.1.2 Guaranteed service levels - Additional direct retailer compensation

| GSL | Customer Impact | Indicative payment | Guiding principle for allocation to MW vs YVW | Notice periods How \& who it goes to? | Verification of incidents | Reporting What is the record \& where stored | Approach to abatement payments |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Planned event <br> - breach of minimum notice period to YVW (e.g., planned water or sewerage service interruption or change of primary water source) - nonemergency | Household impact unexpected loss of amenity (for example noticeable change in taste, odour of water supply) | Match YVW payment of $\$ 50$ to household customer | - Direct rebate per event where MW is the cause | - For planned water or sewer service interruptions YVW to be advised 14 days in advance or by agreement 7 days in advance (Control Room to Control Room) <br> - For change of primary water source advised to YVW as per nominated days below ${ }^{1}$ (or less by agreement or | - YVW records and quarterly notification to MW <br> - Any misalignment to be resolved by Operating Reps | - As per retailer record | - Review quarterly <br> - Rebate on monthly invoice to retailer |

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|  |  |  |  | emergency ${ }^{2}$ ) in advance of change (Control Room to Control Room) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Unplanned event or Planned event (minimum notice period not met) | YVW impact additional management of customer calls / complaints (Average calls / day 400) <br> Greater than 100 calls / day increase per event caused by MW <br> Or <br> Greater than 10 calls / hour per event caused by MW (excluding where notice periods for planned events have been achieved ${ }^{1,2}$ ) | \$5,000 per incident to retail water company | - Direct rebate per event where MW is the cause | - For planned water or sewer service interruptions YVW to be advised 14 days in advance or by agreement 7 days in advance (Control Room to Control Room) <br> - For change of primary water source advised to YVW as per nominated days below ${ }^{1}$ (or less by agreement or emergency ${ }^{2}$ ) in advance of change (Control Room to Control Room) | - YVW records and quarterly notification to MW - Any misalignment to be resolved by Operating Reps | - As per retailer record | - Review quarterly <br> - Rebate on monthly invoice to retailer |
| Significant Unplanned water or sewerage service disruption / event | YVW impact additional management of customer calls / complaints and field response | MW would make payments at our discretion to YVW based on an assessment of | - Direct rebate per event where MW is the cause | - N/A | - YVW records and quarterly notification to MW - Any misalignment to be resolved by Operating Reps | - As per retailer record | - Review quarterly <br> - Rebate on monthly invoice to retailer |


|  |  | the impact |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pressure deviations above tolerances | Damage to retailer infrastructure | Actual cost where $>\$ 10 \mathrm{~K}$ per incident to YVW | - Direct rebate per event based on infrastructure damage where MW is the cause | - N/A | - YVW records and quarterly notification to MW <br> - Any misalignment to be resolved by Operating Reps | - As per retailer record | - Review quarterly <br> - Rebate on monthly invoice to retailer |

 Valley Towns (2 days).
2 Emergency event: Change required to avert significant supply disruption or water quality issue, but supply remains Bulk Water Supply Agreement compliant.

## South East Water

13.3 Table D.2.1 Guaranteed service levels - Back-to-Back abatements to retailer customers

| MW proposed GSL | SEW equivalent | Guiding principle for allocation to MW vs SEW | Notice periods How \& who it goes to? | Verification of incidents | Reporting What is the record \& where stored | Approach to abatement payments |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Unplanned water quality | - None presently | - N/A - SEW don't make a payment to customers for water quality issues | - N/A | - N/A | - N/A | - N/A |
| Unplanned water service interruption | - $\$ 60$ rebate for more than 5 interruptions per year, or unplanned interruption longer | -Proportional payment by MW (i.e., If MW causes 1 of 6 events, then MW pays $1 / 6$ * $\$ 60$ | - To classify as a planned water service interruption event any interruption to water | - SEW records and quarterly notification to MW <br> - Any misalignment to be resolved by | - As per retailer record | - Review quarterly <br> - Rebate on monthly invoice to retailer |

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|  | than 5 hours to resolve. | = \$10) <br> - If MW causes an unplanned interruption $>5$ hours MW pays full $\$ 60$ rebate per affected customer | service to be advised to SEW 14 days in advance or by agreement 7 days in advance (Control Room to Control Room) | Operating Reps |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Unplanned sewer service interruption | - \$60 rebate for more than 3 interruptions per year, or unplanned interruption longer than 4 hours to resolve. | -Proportional payment by MW (i.e., If MW causes 1 of 4 events, then MW pays 1/4*\$60 = \$15) <br> - If MW causes an unplanned interruption >4 hours MW pays full $\$ 60$ rebate per affected customer | - To classify as a planned sewer service interruption event any interruption to sewer service to be advised to SEW 14 days in advance or by agreement 7 days in advance (Control Room to Control Room) | - SEW records and quarterly notification to MW <br> - Any misalignment to be resolved by Operating Reps | - As per retailer record | - Review quarterly <br> - Rebate on monthly invoice to retailer |
| Sewer spill (caused by system failure) | - \$1000 rebate when sewer spill on property takes more than 5 hours to contain. <br> - $\$ 1500$ rebate spill within premises that takes longer than 1 hour to contain. | - Direct rebate per event where MW is the cause <br> - Direct rebate per event where MW is the cause | - N/A | - SEW records and quarterly notification to MW <br> - Any misalignment to be resolved by Operating Reps | - As per retailer record | - Review quarterly <br> - Rebate on monthly invoice to retailer |

[^64]Table D.2.2 Guaranteed service levels - Additional direct retailer compensation

| GSL | Customer Impact | Indicative payment | Guiding principle for allocation to MW vs SEW | Notice periods How \& who it goes to? | Verification of incidents | Reporting What is the record \& where stored | Approach to abatement payments |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Planned event - breach of minimum notice period to SEW (e.g., planned water or sewerage service interruption or change of primary water source) - nonemergency | Household or business impact unexpected loss of amenity (for example noticeable change in taste, odour of water supply) | N/A - SEW don't make a payment to customers for breach of minimum notice periods | - N/A - Track performance | - For planned water or sewer service interruptions SEW to be advised 14 days in advance or by agreement 7 days in advance (Control Room to Control Room) <br> - For change of primary water source SEW to be advised 2 days $^{1}$ (or less by agreement or emergency ${ }^{2}$ ) in advance of change in advance (Control Room to Control Room) | - MW \& SEW records and quarterly SEW notification to MW - Any misalignment to be resolved by Operating Reps | - As per retailer and MW record | - Review quarterly - Rebate on monthly invoice to retailer |
| Unplanned event or | SEW impact additional | \$5,000 per incident to | - Direct rebate per event where MW | - For planned water or sewer | - MW \& SEW records and | - As per retailer and | - Review quarterly |


| Planned event (minimum notice period not met) | management of customer calls / complaints <br> (Average calls / day 400) <br> Greater than 100 <br> calls / day increase <br> per event caused by <br> MW <br> Or <br> Greater than 10 <br> calls / hour per <br> event caused by <br> MW <br> (excluding where notice periods for planned events have been achieved ${ }^{1,2}$ and that is it determined that Melbourne Water's actions have not unnecessarily caused the need for a planned event.) | retail water company | is the cause | service interruptions SEW to be advised 14 days in advance or by agreement 7 days in advance (Control Room to Control Room) <br> - For change of primary water source SEW to be advised 2 days ${ }^{1}$ (or less by agreement or emergency ${ }^{2}$ ) in advance of change in advance (Control Room to Control Room) | quarterly SEW notification to MW <br> - Any <br> misalignment to be resolved by Operating Reps | MW record | - Rebate on monthly invoice to retailer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Significant Unplanned water or sewerage service disruption / event | SEW impact additional management of customer calls / complaints and field response | MW would make payments at our discretion to SEW based on an assessment of | - Direct rebate per event where MW is the cause | - N/A | - SEW records and quarterly notification to MW <br> - Any misalignment to be resolved by Operating Reps | - As per retailer record | - Review quarterly <br> - Rebate on monthly invoice to retailer |


|  |  | the impact |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pressure deviations above tolerances | Damage to retailer infrastructure | Actual cost where $>\$ 10 \mathrm{~K}$ per incident to SEW | - Direct rebate per event based on infrastructure damage where MW is the cause | - N/A | - SEW records and quarterly notification to MW - Any misalignment to be resolved by Operating Reps | - As per retailer record | - Review quarterly - Rebate on monthly invoice to retailer |

1 Primary water source changes (non-emergency): Tarago to Cardinia; CP1 $>50 \%$ change in desalinated supply vs Cardinia supply to Peninsula.
2 Emergency event: Change required to avert significant supply disruption or water quality issue but supply remains Bulk Water Supply Agreement compliant.

## City West Water

13.5 Table D.3.1 Guaranteed service levels - Back-to-Back abatements to retailer customers

| MW proposed GSL | CWW equivalent | Guiding principle for allocation to MW vs CWW | Notice periods How \& who it goes to? | Verification of incidents | Reporting What is the record \& where stored | Approach to abatement payments |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Unplanned water quality | - None Presently | - N/A | - N/A | - N/A | - N/A | - N/A |
| Unplanned water service interruption | - $\$ 200$ rebate for more than 5 unplanned interruptions per year, $\$ 100$ for more than 3 <br> - $\$ 100$ water service unplanned disruption not | -Proportional payment by MW (i.e., If MW causes 1 of 6 events, then MW pays $1 / 6$ * $\$ 200$ = \$33.33) <br> - If MW is the cause of an unplanned | - To classify as a planned water service interruption event any interruption to water service to be advised to CWW 14 days in advance or by agreement 7 | - CWW records and quarterly notification to MW <br> - Any misalignment to be resolved by Operating Reps | - As per retailer record | - Review quarterly <br> - Rebate on monthly invoice to retailer |

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|  | resolved within 5 hours of notification | disruption event $>5$ hours of notification | days in advance (Control Room to Control Room) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Unplanned sewer service interruption | - \$100 more than 3 sewer blockages in a year <br> - $\$ 75$ sewer blockage not resolved within 5 hours of notification | -Proportional payment by MW (i.e., If MW causes 1 of 4 events, then MW pays $1 / 4$ * $\$ 100$ $=\$ 25.00$ ) <br> - If MW is the cause of an unplanned blockage event $>5$ hours of notification | - To classify as a planned sewer service interruption event any interruption to sewer service to be advised to CWW 14 days in advance or by agreement 7 days in advance (Control Room to Control Room) | - CWW records and quarterly notification to MW <br> - Any misalignment to be resolved by Operating Reps | - As per retailer record | - Review quarterly <br> - Rebate on monthly invoice to retailer |
| Sewer spill (caused by system failure) | - $\$ 1000$ sewer spill in house <br> - $\$ 3000$ sewer spill in house not contained within 1 hour <br> - $\$ 75$ sewer spill in property not contained within 5 hours of notification | - Direct rebate per event caused by MW <br> - Direct rebate per event caused by MW <br> - Direct rebate per event caused by MW | - N/A | - CWW records and quarterly notification to MW <br> - Any misalignment to be resolved by Operating Reps | - As per retailer record | - Review quarterly <br> - Rebate on monthly invoice to retailer |

[^65]Table D.3.2 Guaranteed service levels - Additional direct retailer compensation

| GSL | Customer Impact | Indicative payment | Guiding principle for allocation to MW vs CWW | Notice periods How \& who it goes to? | Verification of incidents | Reporting What is the record \& where stored | Approach to abatement payments |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Planned event - breach of minimum notice period to CWW (e.g., planned water or sewerage service interruption or change of primary water source) - nonemergency | Household impact - unexpected loss of amenity (for example noticeable change in taste, odour of water supply) | Match CWW payment of $\$ 75$ to household customer | - Direct rebate per event where MW is the cause | - For planned water or sewer service interruptions CWW to be advised 14 days in advance or by agreement 7 days in advance (Control Room to Control Room) <br> - For change of primary water source CWW to be advised 2 business days ${ }^{1}$ (or less by agreement or emergency ${ }^{2}$ ) in advance of change (Control Room to Control Room) | - CWW records and quarterly notification to MW - Any misalignment to be resolved by Operating Reps | - As per retailer record | - Review quarterly - Rebate on monthly invoice to retailer |

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| Unplanned event or Planned event (minimum notice period not met) | CWW impact additional management of customer calls / complaints (Average calls / day 140) <br> Greater than 35 calls / day increase per event caused by MW <br> Or <br> Greater than 10 calls / hour per event caused by MW <br> (excluding where notice periods for planned events have been achieved ${ }^{11,2}$ ) | \$5,000 per incident to retail water company | - Direct rebate per event where MW is the cause | - For planned water or sewer service interruptions CWW to be advised 14 days in advance or by agreement 7 days in advance (Control Room to Control Room) - For change of primary water source CWW to be advised 2 business days ${ }^{1}$ (or less by agreement or emergency ${ }^{2}$ ) in advance of change (Control Room to Control Room) | - CWW records and quarterly notification to MW <br> - Any <br> misalignment to be resolved by Operating Reps | - As per retailer record | - Review quarterly - Rebate on monthly invoice to retailer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Significant Unplanned water or sewerage service disruption / event | CWW impact additional management of customer calls / complaints and field response | MW would make payments at our discretion to CWW based on an assessment of the impact | - Direct rebate per event where MW is the cause | - N/A | - CWW records and quarterly notification to MW - Any misalignment to be resolved by Operating Reps | - As per retailer record | - Review quarterly <br> - Rebate on monthly invoice to retailer |
| Pressure deviations | Damage to retailer | Actual cost where $>\$ 10 \mathrm{~K}$ | - Direct rebate per event based | - N/A | - CWW records and quarterly | - As per retailer record | - Review quarterly |


| above <br> tolerances | infrastructure | per incident to CWW | on infrastructure damage where MW is the cause |  | notification to <br> - Any <br> misalignment be resolved by Operating Rep |  | - Rebate on monthly invoice to retailer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GSL | Customer Impact | Indicative payment | Guiding principle for allocation to MW vs CWW | Notice periods How \& who it goes to? | Verification of incidents | Reporting What is the record \& where stored | Approach to abatement payments |

1 Primary water source changes (non-emergency): St Albans supply from Winneke vs Greenvale (via Sharps Road); Greenvale by-pass (Winneke / Silvan shandy).
2 Emergency event: Change required to avert significant supply disruption

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[^0]:    ${ }^{1}$ Clause 16 of the Water Industry Regulatory Order 2014 requires us to issue a draft decision. Melbourne Water's price submission and our draft decision are available at https://www.esc.vic.gov.au/water/water-prices-tariffs-and-special-drainage/water-price-reviews/melbourne-water-price-review-2021.
    ${ }^{2}$ Before the commencement of a regulatory period, clause 10 of the Water Industry Regulatory Order 2014 requires us to make a price determination which determines the maximum prices a water corporation may charge, or the manner in which its prices are to be calculated, determined or otherwise regulated during the regulatory period. See Essential Services Commission 2021, Melbourne Water Determination: 1 July 2021 - 30 June 2026, June. Because we did not accept Melbourne Water's price submission in its entirety, this determination has been made pursuant to clause 14(a)(ii) of the WIRO.

[^1]:    ${ }^{3}$ On 1 July 2021, City West Water and Western Water will integrate to form a new water corporation called Greater Western Water. For the purpose of this final decision, the two service regions will be referred to as City West Water and Western Water, respectively.
    ${ }^{4}$ Essential Services Commission 2016, Water pricing framework and approach: Implementing PREMO from 2018, October. Our PREMO incentive mechanism focuses on five elements: performance, risk, engagement, management and outcomes. These elements form the 'PREMO' acronym.

[^2]:    ${ }^{5}$ Submissions are available on our website at https://www.esc.vic.gov.au/water/water-prices-tariffs-and-special-drainage/water-price-reviews/melbourne-water-price-review-2021.

[^3]:    ${ }^{6}$ As indicated in our draft decision, we have updated Melbourne Water's inflation forecast using recent market data and our current methodology to estimate inflation.
    ${ }^{7}$ Our final decision forecast inflation is 2.2 per cent per annum. This is similar to IPART's forecast of 2.2 per cent (WACC Biannual Update February 2021 pp. 2); QCA's forecast inflation of 2.42 per cent (Queensland Competition Authority 2020, Gladstone Area Water Board price monitoring 2020-25 Part A: Overview, May 2020 pp 24; and ESCOSA's forecast of 2.07 per cent (Essential Services Commission of Australia 2020, SA Water Regulatory Determination 2020, June pp 229).

[^4]:    ${ }^{9}$ The prescribed services are listed at clause 7(b) of the WIRO.
    ${ }^{10}$ Essential Services Commission 2019, Melbourne Water's 2021 water price review: Guidance paper, 13 November; Essential Services Commission 2020, Additional guidance issued by the Essential Services Commission to Melbourne Water, 18 August.

[^5]:    ${ }^{11}$ This is a requirement of the WIRO, clause 14(b).
    ${ }^{12}$ This is provided for under the WIRO, clause 14(b)(i).

[^6]:    13 Including the guidance we issued in November 2019 and August 2020.

[^7]:    ${ }^{14}$ WIRO 2014, clause 9.
    ${ }^{15}$ Our reasons are set out in Essential Services Commission 2021, Melbourne Water Draft decision: 2021 Water Price Review, 17 March, pp 3-4.
    ${ }^{16}$ Melbourne Water 2021, Price Submission 2021 - Response to ESC Draft Decision, 4 May.
    ${ }^{17}$ As outlined is our draft decision, we considered the risk to customers arising from the uncertainty would result in higher prices for end-use customers. Although we did not quantify, Melbourne Water's pre-pandemic demand forecasts and related growth expenditure over the five years would have far exceeded the costs to customers through higher prices than the cost to Melbourne Water and customers from developing a price submission.

[^8]:    ${ }^{18}$ Water and Sewerage Customer Council 2021, 2021 Draft Price Submission: WSCC Final Response, 4 May.
    ${ }^{19}$ Consumer Action Law Centre 2021, Melbourne Water Draft Decision, 4 May.

[^9]:    ${ }^{20}$ Melbourne Water 2020, Melbourne Water Price Submission 2021: 1 July 2021 to 30 June 2026, 9 November, pp. 35-36.
    ${ }^{21}$ Melbourne Water 2021, submission to the Essential Services Commission paper 'Melbourne Water draft decision: 2021 Water Price Review', p22, 4 May.

[^10]:    22 The Water and Sewerage Customer Council 2021, submission to the Essential Services Commission paper 'Melbourne Water draft decision: 2021 Water Price Review', 25 March. This document was provided twice to us, firstly by Melbourne Water during the review and then as a response to our draft decision by the Customer Council.
    ${ }^{23}$ Urban Development Industry of Australia 2021, submission to the Essential Services Commission paper 'Melbourne Water draft decision: 2021 Water Price Review', 4 May.
    ${ }^{24}$ Consumer Action Law Centre (CALC) 2021, submission to the Essential Services Commission paper 'Melbourne Water draft decision: 2021 Water Price Review', 5 May.
    All of these customer submissions are available at https://www.esc.vic.gov.au/water/water-prices-tariffs-and-special-drainage/water-price-reviews/melbourne-water-price-review-2021\#tabs-container2

[^11]:    ${ }^{25}$ Issued under section 37, Essential Services Commission Act 2001. Notice issued to Melbourne Water 10 June 2021.
    ${ }^{26}$ This approach is consistent with other regulatory processes with regard to relying on willingness to pay survey in assessing the proposed expenditure. For instance Endeavour Energy's Customer Engagement Approach paper prepared by Newgate Research found that the primary concern of Consumer Challenge Panel is that " WTP... can provide useful insights on consumer preferences about competing priorities, but only where there is a legitimate business case for the expenditure in the first instance". CCP report, p. 6
    ${ }^{27}$ Visit https://www.esc.vic.gov.au/water/water-prices-tariffs-and-special-drainage/water-price-reviews/melbourne-water-price-review-2021

[^12]:    ${ }^{28}$ Melbourne Water 2021, op. cit., section 3.1 pp. 19
    ${ }^{29}$ Melbourne Water confirmed to us on 15 December 2020 in an email that it had not provided the unlocked model as we requested.
    ${ }^{30}$ Water Pricing Submission Review: Response II, BIDA Research Centre, Final report: June 2021.

[^13]:    ${ }^{31}$ Newgate Research 2021, Submission \#2 - Newgate Research's Response to the Essential Services Commission's Draft Decision on Melbourne Water's 2021-2026 Price Proposal, March 2021, 4 May.
    ${ }^{32}$ Business Intelligence \& Data Analytics (BIDA) Research Centre 2021, op. cit.
    ${ }^{33}$ Consumer Action Law Centre 2021, op. cit.

[^14]:    ${ }^{34}$ The Water and Sewerage Customer Council mentioned in its submission to Melbourne Water's draft price submission its desire to see stable or declining prices in real terms and its preference for stable bills and smooth price paths. In its response to our draft decision, the council reiterates this preference given many water customers are facing financial hardship due to the coronavirus pandemic. Further to this, the Consumer Action Law Centre and two consumers noted affordability was particularly of concern due to the current economic conditions and uncertainty.

[^15]:    ${ }^{35}$ Essential Services Commission 2019, op. cit., p. 19. We required Melbourne Water to propose a set of outcomes that its customers will receive during the next regulatory period.

[^16]:    ${ }^{36}$ Melbourne Water 2021, op. cit., p. 34.
    ${ }^{37}$ Melbourne Water 2021, op. cit., p. 35.
    ${ }^{38}$ Essential Services Commission 2019, op. cit., p. 20.
    ${ }^{39}$ Melbourne Water 2021, op. cit., p. 35.
    ${ }^{40} \mathrm{lbid}$.

[^17]:    ${ }^{41}$ Goulburn Valley Water 2017, Price Submission, 28 September, p. 38.

[^18]:    42 We received input from officers of the Department of Environment, Land, Water and Planning, Department of Health, and Environment Protection Authority Victoria, to discuss their expectations of Melbourne Water in the regulatory period from 1 July 2021. We had regard to their views in our draft decision. It is Melbourne Water's responsibility to ensure it has priced accordingly to meet all its legislative and regulatory obligations and requirements during the pricing period.
    ${ }^{43}$ Essential Services Commission 2021, op. cit., p. 16; Refer to Table 4.1.

[^19]:    ${ }^{44}$ Because the commission's draft decision was to approve a three-year regulatory period, figures for 2024-25 and 202526 for our draft decision are calculations that represent a notional revenue requirement based on the same principles and requirements of our guidance.

[^20]:    ${ }^{45}$ Essential Services Commission 2019, op. cit., pp. 37-39.
    ${ }^{46}$ Melbourne Water proposed in its price submission, smoothing of the capital expenditure profile for pricing purposes to accept some delivery risk associated with years one and two. This was achieved using the depreciation override (for new

[^21]:    ${ }^{48}$ Essential Services Commission 2021, op. cit., pp. 23-24.

[^22]:    ${ }^{49}$ Deloitte Access Economics 2021, Expenditure review - Melbourne Water Response to Draft Decision: Final Report for the Essential Services Commission - Public, 21 May. You can find this report at https://www.esc.vic.gov.au/water/water-prices-tariffs-and-special-drainage/water-price-reviews/melbourne-water-price-review-2021.

[^23]:    ${ }^{50}$ Essential Services Commission 2021, op. cit., pp. 25-31.

[^24]:    ${ }^{51}$ Melbourne Water 2021, op. cit., p. 79.
    ${ }^{52}$ Melbourne Water 2021, op. cit., pp. 92-97.
    ${ }^{53}$ Yarra Riverkeeper Association 2021, Response to the Draft Decision for Melbourne Water's 2020 Price Review Drainage and Waterway Charges - draft decision, 4 May, pp. 1-2.
    ${ }^{54}$ Urban Development Institute of Australia Victoria 2021, op. cit., p. 3.
    ${ }^{55}$ Consumer Action Law Centre 2021, op. cit., p. 3.
    ${ }^{56}$ VicWater 2021, Re: Melbourne Water price review 2021, 3 May, p.1.; Water and Sewerage Customer Council 2021, op. cit., p. 2.

[^25]:    ${ }^{57}$ Essential Services Commission 2021, op. cit., p. 30.
    ${ }^{58}$ Deloitte Access Economics 2021, op. cit., pp. 5-11.

[^26]:    ${ }^{60}$ Melbourne Water 2021, op. cit., pp. 72-75.
    ${ }^{61}$ Essential Services Commission 2021, op. cit., p. 28.
    ${ }^{62}$ Melbourne Water 2021, op. cit., p. 69.
    ${ }^{63}$ Essential Service Commission 2019, op. cit., pp. 20-23.

[^27]:    ${ }^{64}$ Deloitte Access Economics 2021, op. cit. You can find this report at https://www.esc.vic.gov.au/water/water-prices-tariffs-and-special-drainage/water-price-reviews/melbourne-water-price-review-2021.

[^28]:    ${ }^{65}$ Melbourne Water 2021, op. cit., p. 76.

[^29]:    ${ }^{66}$ Melbourne Water 2021, op. cit., p. 40.
    67 VicWater 2021, op. cit., p. 1.
    ${ }^{68}$ Water and Sewerage Customer Council 2021, op. cit., p. 2.
    ${ }^{69}$ Yarra Riverkeeper Association 2021, op. cit., pp. 1-2.

[^30]:    ${ }^{70}$ Anonymous 2021, submission to the Essential Services Commission on 'Melbourne Water draft decision', May, p. 1.
    ${ }^{71}$ Water and Sewerage Customer Council 2021, op. cit., p.12.
    ${ }^{72}$ Consumer Action Law Centre 2021, op. cit., pp. 3-4.
    ${ }^{73}$ Deloitte Access Economics 2021, op. cit.

[^31]:    ${ }^{74}$ Essential Services Commission 2021, op. cit., pp. 78-79.

[^32]:    ${ }^{75}$ Deloitte Access Economics 2021, op. cit., pp. 35-36.
    ${ }^{76}$ In its review of Melbourne Water's expenditure, Deloitte considered that the stormwater harvesting projects proposed by Melbourne Water did not identify how harvested stormwater would be used and that it considered that while stormwater harvesting schemes had merit they also required further cost-benefit analysis to justify the schemes.
    ${ }^{77}$ In information provided to us in support of capital and operating expenditure related to storm water harvesting projects, Melbourne Water identified the relevant expenditure as required to meet its obligations under the Water Act 1989, the Environment Protection Act 2017, the Environment Protection Act 1970, and contained within the Statement of Obligations 2015.

[^33]:    ${ }^{78}$ Water Industry Regulatory Order 2014, clause 11(d).

[^34]:    ${ }^{79}$ Consistent with the schedule of payments Melbourne Water received from Department of Environment, Land, Water and Planning received on 22 January 2021.
    ${ }^{80}$ Water and Sewerage Customer Council 2021, op. cit., p. 17.
    ${ }^{81}$ Consumer Action Law Centre 2021, op. cit., p. 4.

[^35]:    ${ }^{82}$ Net capital expenditure is calculated by deducting government and customer contributions from gross capital expenditure. Customer contributions reflects revenue earned from new connections made to the water corporation's water, sewerage or recycled water networks. The gross capital expenditure includes the capitalised desal costs.

[^36]:    ${ }^{83}$ Assessment of: (1) the regulatory depreciation is set out in Chapter 4 and (2) the capital expenditure is set out in Chapter 6.

[^37]:    ${ }^{84}$ Melbourne Water 2021, op. cit., pp. 52-53.
    ${ }^{85}$ Urban Development Institute of Australia Victorian 2021, op. cit.

[^38]:    ${ }^{86}$ Melbourne Water proposed a revised 2020-21 cost of debt estimate (nominal), different to the values specified in our guidance. Melbourne Water had effectively proposed a more up-to-date forecast in its price submission than the value specified in our guidance.
    ${ }^{87}$ We received data (Reserve Bank of Australia 10-year BBB-rated corporate bond rates) on the actual trailing average cost of debt for 2020-21 from Treasury Corporation Victoria in April 2021 and we updated the 2020-21 estimates for our final decision.

[^39]:    ${ }^{88}$ Melbourne Water 2021, op. cit., p. 109.
    89 Australian government bond yield data and Statement of Monetary Policy CPI forecast data that are used to calculate the forecast inflation estimates are sourced from Reserve Bank of Australia's website.

    90 The consultant's report on the methodology used to calculate the forecast inflation is published on our website.

[^40]:    ${ }^{91}$ Data sourced from table F16-Indicative Mid Rates of Australian Government Securities sourced from Reserve Bank of Australia's website.
    ${ }^{92}$ Our final decision forecast inflation is 2.2 per cent per annum. This is similar to IPART's forecast of 2.2 per cent (WACC Biannual Update February 2021 pp. 2); QCA's forecast inflation of 2.42 per cent (Queensland Competition Authority 2020, Gladstone Area Water Board price monitoring 2020-25 Part A: Overview, May 2020 pp 24; and ESCOSA's forecast of 2.07 per cent (Essential Services Commission of Australia 2020, SA Water Regulatory Determination 2020, June pp 229).
    ${ }^{93}$ Essential Services Commission 2019, op. cit., pp. 33-37.
    ${ }^{94}$ Essential Services Commission 2019, op. cit., pp. 34-35.

[^41]:    ${ }^{95}$ WIRO clause 8(b)(ii) and ESC Act section 8A(1)(b).
    ${ }^{96}$ Essential Services Commission 2019, op. cit., pp. 48-49
    ${ }^{97}$ Net Debt / Regulatory Asset Value (Gearing) measures the debt component of the regulatory capital structure.

[^42]:    ${ }^{98}$ The 'credit opinion' report is not available to public as it contains commercial in confidence information.

[^43]:    ${ }^{99}$ Essential Services Commission 2021, op. cit.

[^44]:    ${ }^{100}$ These signed contracts with developers are forward contracts that developers are entering into with Melbourne Water involving commitments to pay contributions and construct infrastructure in new subdivisions across Melbourne driven by developers' expectations of future lot sales.
    ${ }^{101}$ City West Water, South East Water and Yarra Valley Water are Melbourne Water's three largest retail bulk water customers. These three water corporations account for 96 per cent of 2018-19 bulk water demand.

    102 Consumer Action Law Centre 2021, op. cit.
    ${ }^{103}$ Urban Development Industry of Australia 2021, op. cit.

[^45]:    ${ }^{104}$ Water and Sewerage Customer Council 2021, op. cit.
    ${ }^{105}$ Melbourne Water 2021, op. cit., p. 114.
    106 Melbourne Water 2021, op. cit., p. 67.
    ${ }^{107}$ We recommend that Melbourne Water uses a simple average rather than a stepped weighted average of the past five years as an input for forecasting sewage volume and load demand. Using a simple average means that if the most recent year is an outlier (for example due to excessive rainfall), the most recent year outlier figure will not be weighted more strongly simply by virtue of being the most recent year of data.

[^46]:    Source: Melbourne Water's response to our request for information received on 25 May 2021, Melbourne Water 2021,
    Price Submission 2021 - Response to ESC Draft Decision, 4 May

[^47]:    108 On 1 July 2021, City West Water and Western Water will integrate to form a new water corporation called Greater Western Water. For the purpose of this final decision, the two service regions will be referred to by their former business names.

    109 Water Industry Regulatory Order 2014, clause 11(d)

[^48]:    ${ }^{110}$ Water and Sewerage Customer Council 2021, op. cit.
    ${ }^{111}$ Consumer Action Law Centre 2021, op. cit.
    ${ }^{112}$ Charis Cheng 2021, Submission on Melbourne Water Draft Decision, 5 May.
    ${ }^{113}$ Travis Ahearn 2021, Submission on Melbourne Water Draft Decision, 28 March.
    ${ }^{114}$ Water Industry Regulatory Order 2014, clause 11(d)

[^49]:    ${ }^{115}$ Regulatory Managers Forum 2021, Customer Council Advisory Report for Pricing Submission, pp. 46-47.
    ${ }^{116}$ Regulatory Managers Forum, op. cit., p. 41.
    ${ }^{117}$ Melbourne Water 2021, op. cit., p. 67.

[^50]:    ${ }^{118}$ Water and Sewerage Customer Council 2021, op. cit.
    119 Melbourne Water 2020, Melbourne Water pricing submission supplement, p. 6-58.

[^51]:    120 Essential Services Commission 2016, Melbourne Water Final Decision, p. 75
    ${ }^{121}$ Melbourne Water committed to a 10-year transition of non-residential customers on property-based value to a cost reflective tariff.

[^52]:    ${ }^{122}$ Note that these prices are nominal, meaning Melbourne Water will not apply the CPI adjustment year-to-year.

[^53]:    123 Essential Services Commission 2019, op. cit., p. 74.
    124 Melbourne Water 2019, op. cit., p. 7-11.
    ${ }^{125}$ Melbourne Water's response to a request for information received on 18 May 2021.
    126 Melbourne Water 2021, op. cit., pp. 117-18.

[^54]:    127 Urban Development Industry of Australia Victoria 2021, op. cit.

[^55]:    ${ }^{128}$ Melbourne Water 2021, op. cit., page 113

[^56]:    ${ }^{130}$ Noting this will apply to adjust prices in 2021-22.

[^57]:    ${ }^{131}$ This was explicitly stated in our additional guidance provided to Melbourne Water in August 2020. Contrary to Melbourne Water's claim that we did not state its response to the pandemic would materially impact its PREMO assessment. The additional guidance was issued to specifically address the pandemic, and we extended the submission due date accordingly.
    ${ }^{132}$ We did not use the comparisons with retail water corporations to establish Melbourne Water's PREMO ratings, as was suggested by Melbourne Water. Rather, we provided references in our draft decision to some specific proposals we consider reflected an 'Advanced' price submission as illustrative examples.

[^58]:    ${ }^{133}$ Essential Services Commission 2019, op. cit., p. 67
    134 The Water and Sewerage Customer Council 2021, submission to the Essential Services Commission paper 'Melbourne Water draft decision: 2021 Water Price Review', 25 March

    135 Urban Development Industry of Australia 2021, op. cit.
    ${ }^{136}$ Consumer Action Law Centre 2021, op. cit.
    ${ }^{137}$ Essential Services Commission 2019, op. cit., p. 68

[^59]:    ${ }^{138}$ Essential Services Commission 2019, op. cit; Essential Services Commission 2020, op. cit.

[^60]:    ${ }^{139}$ The regulatory rate of return is comprised of the cost of debt and the return on equity.

[^61]:    ${ }^{140}$ Bureau of Meteorology 2021, National performance report 2019-20: urban water utilities, part A, Melbourne.
    141 Ibid.
    ${ }^{142}$ Includes Icon Water, Sydney Water, Hunter Water, Gosford City Council, Wyong Shire Council, Power and Water Corp, Urban Utilities, Unity Water, SA Water and TasWater.
    ${ }^{143}$ Essential Services Commission of South Australia 2018, SA Water Our Plan 2020-24, December; Independent Pricing and Regulatory Tribunal 2019, WACC biannual update, August.

[^62]:    ${ }^{144}$ Essential Services Commission 2016, Water Pricing Framework and Approach, Implementing PREMO from 2018, October, pp. 11-13.
    ${ }^{145}$ Essential Services Commission 2019, op. cit., p. 2.
    ${ }^{146}$ Essential Services Commission 2014, Information paper for the Independent Review of the Economic Regulatory Framework, April.

[^63]:    Appendix C

[^64]:    Appendix C

[^65]:    Appendix C

