



# Mid-term Price Review

**GAWB SUBMISSION**



**Gladstone Area  
Water Board**

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# 1. Introduction

## 1.1 Purpose of this submission

On 28 June 2019 the Treasurer issued a Referral and Direction Notice (Referral Notice) under section 23A of the *Queensland Competition Authority Act 1997*, requiring the Queensland Competition Authority (QCA) to conduct a price monitoring investigation of the Gladstone Area Water Board (GAWB) for the period from 1 July 2020 to 30 June 2025 (the 2021-25 regulatory period).

This investigation was completed with the release of the QCA's Final Report on 3 June 2020 (Final Report). As noted by the QCA, its report set out the findings of its price monitoring investigation, which had "an informative rather than deterministic purpose"<sup>1</sup> and did not bind GAWB.

Section D(1.2)(c) of the Referral Notice also requires the QCA to provide a further report to the Treasurer in the form of a comparison of:

- annual prices charged by GAWB over the period 1 July 2020 to 30 June 2023; and
- the QCA's findings in regard to prices in its Final Report (2020).

GAWB may provide a submission justifying any deviations between its prices charged to customers and the QCA's findings from the Final Report. This submission has been prepared in compliance with that Referral Notice.

## 1.2 Contents of this submission

Based on the terms of the Referral Notice outlined above, this submission provides the actual prices charged by GAWB for the period between 1 July 2020 and 30 June 2023 and a comparison against the indicative prices published by the QCA in its Final Report.

In addition to considering prices that would allow GAWB to recover its prudent and efficient costs from providing bulk water supply services over the 2021-25 regulatory period, the Referral Notice directed the QCA to provide advice on measures to prevent the further accumulation of revenue under-recoveries by GAWB.

Since GAWB's first price investigation in the early 2000s and up to 30 June 2020, GAWB had been charging prices that were not fully recovering the prudent and efficient costs of its bulk water services. This under-recovered revenue was referred to as the accumulated revenue under-recovery (ARUR).

As set out in Part B of the QCA's Final Report, the QCA's findings in relation to the ARUR had two main elements:

- the under-recovery balance associated with the Awoonga Dam raising, which the QCA advised be capitalised and recovered from existing and future customers via prices; and
- the under-recovery balance not associated with the raising of the Awoonga Dam, which the QCA advised be recovered from existing customers (only) via a repayment method

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<sup>1</sup> Queensland Competition Authority (2020A). Final Report, Gladstone Area Water Board Price Monitoring 2020-25, Part A – Overview, p.5.

to be negotiated with GAWB. This amount was therefore not included in the QCA's indicative prices.

The QCA therefore presented two sets of indicative prices in its Final Report, being:

- 2020-21 indicative prices exclusive of the capitalisation of the ARUR associated with the Awoonga Dam augmentation<sup>2</sup>;
- 2020-21 indicative prices inclusive of the capitalisation of the ARUR associated with the Awoonga Dam augmentation<sup>3</sup>.

This submission provides comparisons against both sets of the QCA's indicative prices for the 2020-21 financial year<sup>4</sup>.

This submission also has regard to the information requirements flagged by the QCA in its Final Report<sup>5</sup>, including:

- presenting annual pricing information for all pricing zones for the 2020-21, 2021-22 and 2022-23 financial years;
- an explanation of the drivers of the differences between GAWB's actual prices and the QCA's 2020-21 indicative prices, including individual components and pricing inputs.

The QCA also anticipated that it would need the updated building blocks model used to calculate prices each year. GAWB has provided this separately to the QCA with this submission. This will allow the QCA to verify the adjustments to the pricing inputs presented in this document, as well as the subsequent movement in the Annual Revenue Requirement (ARR) and resultant prices.

### 1.3 Structure of this submission

Based on the above, this submission has been structured as follows:

- section 2 explains the drivers of the differences between GAWB's final prices and the QCA's indicative prices and the impact these variations have had on the ARR;
- section 3 summarises the outcomes in relation to the ARUR having regard to the QCA's findings;
- section 4 summarises GAWB's customer engagement and responds to the one submission received by the QCA in response to its Stakeholder Notice; and
- section 5 presents GAWB's final prices for all pricing zones except Curtis Island, exclusive and inclusive of the under-recovery of the ARUR associated with the Awoonga Dam raising. This includes the comparison against the QCA's indicative prices for the 2020-21 year.

<sup>2</sup> Queensland Competition Authority (2020A). p.133.

<sup>3</sup> Queensland Competition Authority (2020B). Final Report, Gladstone Area Water Board Price Monitoring 2020-25, Part B, pp.32-33.

<sup>4</sup> As the QCA's Final Report only presents indicative prices for the 2020-21 year, this submission only presents the QCA's indicative prices for that year.

<sup>5</sup> Queensland Competition Authority (2020A). p.142.

## **2. Explanation of Variations**

*Following the release of the QCA's Final Report, GAWB reviewed the QCA's findings and subsequently finalised the bulk water prices to apply from 1 July 2020. In finalising its prices, GAWB deviated from a limited number of findings made and pricing inputs used by the QCA in recommending its indicative prices. This section explains the reasons for the differences between the QCA's indicative prices and GAWB's actual final prices.*

## 2.1 Variations from QCA findings

Broadly, the differences between the QCA's indicative prices and GAWB's final prices that applied from 1 July 2020 can be categorised as variations due to:

- updates to key pricing inputs to reflect the most up to date data available prior to setting prices;
- adjustments to the modelling used by the QCA to set its indicative prices; and
- specific findings made by the QCA that were not accepted by GAWB.

A detailed explanation of each of these variations are provided below.

### 2.1.1 Update of key pricing inputs

#### *WACC parameters*

The Weighted Average Cost of Capital (WACC) is a key input in the building block methodology used to set GAWB's ARR and prices. The QCA's Final Report presented its findings on WACC, which it used to set its indicative 2020-21 prices. However, as noted by the QCA in its Final Report, the "price monitoring framework allows GAWB to set its WACC, and we therefore do not prescribe the WACC"<sup>6</sup>.

Consistent with general regulatory practice, GAWB's intent in setting the WACC to apply for a regulatory period is to ensure that it reflects the forward-looking rate of return based on prevailing market conditions as close as is practicable to the start of that regulatory period, allowing sufficient time to update final prices. The two main parameters that are most sensitive to changing market conditions are the risk-free rate and debt risk premium (DRP).

For the purpose of preparing indicative prices in its Final Report, the QCA estimated the risk-free rate and DRP over a 20-day averaging period ending 31 March 2020. In its Final Report, it noted that GAWB had nominated a 20-day averaging period starting 4 May 2020 and therefore the risk-free rate and DRP applied by GAWB in setting its final prices may differ to the values it applied<sup>7</sup>.

GAWB applied the WACC advised by the QCA in its Final Report, subsequently updated for the risk-free rate and DRP as estimated over the 20-day averaging period (from 4 May to 29 May 2020). Those updated values were only slightly higher than the QCA's indicative values, resulting in a post-tax nominal WACC of 4.74%, compared to the QCA's estimate of 4.72%. This is shown in Table 2-1.

<sup>6</sup> Queensland Competition Authority (2020A). p.79.

<sup>7</sup> Queensland Competition Authority (2020A). p.91, p.95.

**Table 2-1: Updates to WACC**

Parameter	QCA final values as applied to indicative prices	GAWB updated values as applied to final prices
Averaging period	20 days ending 31 March 2020	20 days commencing 4 May 2020
Risk-free rate	0.90%	0.91%
Capital structure	50%	50%
Market risk premium	7.0%	7.0%
Asset beta	0.45	0.45
Equity beta	0.73	0.73
Cost of equity	6.00%	6.01%
Credit rating	BBB	BBB
Debt risk premium	2.44%	2.45%
Debt issuance costs	0.108%	0.108%
Cost of debt	3.44%	3.46%
Gamma	0.484	0.484
<b>Post-tax nominal (vanilla) WACC</b>	<b>4.72%</b>	<b>4.74%</b>

### *Demand forecast*

GAWB's demand forecast relied on a probabilistic forecast of demand, with the five-year demand forecast used to set prices adopting the median aggregate forecast value (i.e., a 50% probability of exceedance) for each year. The QCA found that GAWB's proposed demand forecasts for the 2021-25 regulatory period were reasonable "as they are based on the latest available information, historical outcomes or trends and advice from customers"<sup>8</sup>.

The demand forecast used by the QCA to calculate its indicative prices contained in its Final Report, relied on the forecast provided by GAWB at the time of its initial submission (September 2019)<sup>9</sup>.

<sup>8</sup> Queensland Competition Authority (2020A). p.117.

<sup>9</sup> Gladstone Area Water Board (2019A). Bulk Water Price Review, GAWB Submission, 2021-25 Period, Part A, September.



In its response to the QCA's Draft Report, GAWB submitted that<sup>10</sup>:

Subject to the terms of customers' contractual arrangements, there may be scope for the customers to adjust their current reservations prior to the finalisation of prices to apply from 1 July 2020. GAWB has recently written to customers, encouraging them to review their water requirements, given the material impact the demand forecast can have on bulk water prices.

The QCA acknowledged this in its Final Report, including that GAWB will use the information from that process to set final prices for the 2021-25 regulatory period<sup>11</sup>.

GAWB sought confirmation of each customer's water reservations for the 2021-25 regulatory period towards the end of the 2019-20 year. Applying the same methodology as set out in its submission to the QCA, GAWB applied these updated reservations to set final prices from 1 July 2020.

### *Asset capitalisation and disposal for 2019-20*

At the time of making GAWB's initial submission to the QCA, the roll-forward of the Regulated Asset Base (RAB) included a forecast of asset capitalisation and disposals that GAWB expected would occur between 1 July 2019 and 30 June 2020. The need to update the RAB for the actual capitalisation and disposal of assets for this period, prior to the finalisation of prices, was outlined by GAWB in its initial submission<sup>12</sup>.

In the finalisation of prices to apply from 1 July 2020, GAWB updated the forecast roll-forward of the RAB for actual asset capitalisation and disposals for the 2019-20 financial year, up to and including 31 May 2020. This also necessitated an update to the accelerated depreciation associated with disposals.

### *QCA levy*

In June 2020, following the release of its Final Report, the QCA provided GAWB with an updated forecast of its costs to undertake the price monitoring investigation for the 2021-25 regulatory period (the QCA Levy). This amount was higher than GAWB's original forecast. Under the regulatory framework, these costs are passed through to customers. These additional costs were included in GAWB's final prices.

### *Insurance*

For the forecast of GAWB's insurance expenditure for the 2021-25 regulatory period, the QCA's consultant, KPMG, recommended adopting GAWB's most recent forecast for insurance expenditure in 2019-20, escalated using the recommended escalator, along with the forecast costs associated with the asset revaluation in 2020-21 and 2023-24<sup>13</sup>.

In its response to the QCA's Draft Report, GAWB stated that it intended to adopt KPMG's recommendation and that for the purpose of setting its final prices, it would use:

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<sup>10</sup> Gladstone Area Water Board (2020A). 2020 Price Monitoring Investigation, Response to the QCA Draft Report, Part A: Overview, March, p.62.

<sup>11</sup> Queensland Competition Authority (2020A). p.117.

<sup>12</sup> Gladstone Area Water Board (2019A). p.85.

<sup>13</sup> KPMG (2020). Gladstone Area Water Board Expenditure Review, Prudency and Efficiency Assessment, Draft Report Prepared for the Queensland Competition Authority, February, p.152.

- actual industrial special risk costs for the 2020-21 year, escalated by the updated Deloitte Access Economics (DAE) escalator for the remaining years of the regulatory period (2021-22 to 2024-25);
- actual combined general liability costs for the 2019-20 year, escalated by the updated DAE escalator for the regulatory period (2020-21 to 2024-25)<sup>14</sup>.

In its Final Report, the QCA accepted KPMG's recommendations and agreed "that using 2019-20 budgeted costs is appropriate and transparent as these costs are based on outcomes of a recent procurement process through an insurance broker"<sup>15</sup>. It acknowledged GAWB's intent to use expected 2020-21 insurance costs as base year costs and that this was "ultimately at GAWB's discretion to do this"<sup>16</sup>. It also said that it would expect that GAWB would transparently explain this to customers.

Consistent with its stated intent, for the purpose of setting its final prices GAWB based its insurance cost forecast on the quote received via its broker for the 2020-21 financial year, where available. The scope of coverage reflected in this quote was consistent with GAWB's 2019-20 policy and the QCA's finding that it was appropriate to include coverage for cyber-security risks<sup>17</sup>. As noted above, this quote was procured in the competitive market via a broker, as endorsed by the QCA.

Applying this approach, including the DAE escalator accepted by the QCA, the total forecast insurance cost for the 2021-25 regulatory period was \$7.913 million (nominal dollars), which also includes the forecast costs associated with the 2020-21 and 2023-24 asset valuations. Noting the QCA's comments regarding transparency, the above information was included in the letter sent to each customer outlining the basis for GAWB's final prices from 1 July 2020 (refer section 4), along with explanations of the other variations.

### 2.1.2 Adjustments to the QCA's modelling

There were a number of minor variations between the modelling used by the QCA to calculate its 2020-21 indicative prices and GAWB's modelling. A detailed explanation of each of these variations are provided below.

#### *Allocation methodology*

The modelling conducted by the QCA to calculate its indicative prices relied on some simplifying assumptions in the allocation of operating costs that resulted in slight variations to the operating cost allowance, and subsequent ARR, when compared with GAWB's approach. This was noted by the QCA in its Final Report<sup>18</sup>. Where appropriate, GAWB has replaced these simplifying assumptions with actual values to determine final water prices for the 2021-25 regulatory period.

Similarly, the methodology used by the QCA to allocate the operating cost allowance across pricing zones also differs slightly from that applied by GAWB. This variation was

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<sup>14</sup> Gladstone Area Water Board (2020A). pp.30-31. The reason why GAWB was not able to include its actual combined general liability costs for the 2020-21 year is because this was not invoiced until September 2020. GAWB's escalated 2019-20 costs was therefore applied as a proxy value.

<sup>15</sup> Queensland Competition Authority (2020A). p.38.

<sup>16</sup> Queensland Competition Authority (2020A). p.39.

<sup>17</sup> Queensland Competition Authority (2020A). p.38.

<sup>18</sup> Queensland Competition Authority (2020A). p.46.

acknowledged by the QCA in correspondence provided to GAWB at the time of the release of its Final Report<sup>19</sup>.

Whilst the differences in methodologies had very little impact on the ARR in total, given the determination of prices is dependent on the allocation of the ARR to each pricing zone, the difference in methodologies for the allocation of costs across pricing zones contributed to the variation between the QCA's indicative prices and GAWB's prices at a zonal level.

### *Correction of escalation applied to Professional Services (Engineering Services)*

GAWB applies a set of escalators to its operating cost components across the regulatory period. In its modelling of indicative prices for the Professional Services cost component, the QCA amalgamated the majority of consulting costs and escalated them using the Consumer Price Index (CPI). However, engineering consulting costs, which are captured within this cost component, attract a different escalator. This reflects the nature of these costs and the market for these services. The most appropriate escalator to apply to these costs should therefore have been the 'professional services (engineering)' escalator, not CPI.

Whilst the QCA acknowledged that this correction was required in correspondence provided to GAWB at the time of the release of its Final Report<sup>20</sup>, this adjustment was not reflected in the QCA's modelling that supported its indicative prices. In determining prices to apply from 1 July 2020, GAWB used the appropriate escalator to index these costs.

### *Accommodation project*

As part of its ex-post review of GAWB's actual 2015-20 capital expenditure, the QCA reviewed expenditure on new office accommodation at 136 Goondoon Street Gladstone. This replaced GAWB's former premises at 147 Goondoon Street, which at the time of the 2021-25 price investigation, was for sale by GAWB.

The QCA's consultant, KPMG, found the expenditure to be largely prudent and efficient however considered that customers should not bear the cost of holding the unsold property. It therefore recommended that the expected sales proceeds be deducted from the value of the new property that would otherwise enter the RAB, along with transaction costs and estimated capital gains tax. The QCA agreed with KPMG's findings 'in principle' although did not make an adjustment, partly because the impact on revenue and prices was not considered material<sup>21</sup>.

As outlined in its response to the QCA's Draft Report, GAWB agreed with the QCA that the 147 Goondoon Street property should be removed from the RAB – that point was not contentious. However, GAWB had material concerns with the treatment proposed by KPMG, being to deduct these proceeds from the cost of the new premises, as this is inconsistent with regulatory practice and the approach previously applied to GAWB's asset disposals as accepted by the QCA. That practice is:

- once the disposal has occurred, the asset is removed from the RAB based on the written down value of that asset in the RAB (i.e., the residual RAB value);

<sup>19</sup> QCA/KPMG expenditure modelling – Explanatory notes – 29 May 2020. Provided to GAWB on 1 June 2020 with notification via email (1 June 2020)

<sup>20</sup> QCA/KPMG expenditure modelling – Explanatory notes – 29 May 2020. Provided to GAWB on 1 June 2020 with notification via email (1 June 2020).

<sup>21</sup> Queensland Competition Authority (2020A). p.56.

- to ensure that GAWB is able to fully recover the efficient costs of investment in that asset, the residual RAB value is recovered via accelerated depreciation; and
- any sales proceeds GAWB receives from disposing of that asset is then returned to customers by deducting that amount from the accelerated depreciation amount, net of any taxes and transaction costs that GAWB will necessarily incur as part of the sale<sup>22</sup>.

In its Final Report, the QCA found that<sup>23</sup>:

GAWB should make an appropriate adjustment through an asset disposal to the amount of the expected minimum sale price of 147 Goondoon Street before setting final prices for 2020-25... Once the sale of 147 Goondoon Street has been finalised, an adjustment can be made for the realised sale value as part of the RAB roll-forward at the end of the relevant regulatory period.

In light of the QCA's comments, GAWB therefore recognised the anticipated disposal of the 147 Goondoon Street property in the RAB and made associated adjustments for the accelerated depreciation and proceeds of sale in setting final prices to apply from 1 July 2020. This was done in accordance with the approach outlined in GAWB's response to the QCA's Draft Report<sup>24</sup>.

Whilst this adjustment aligns with the QCA's finding with regards to the recognition of the asset disposal associated with the sale of 147 Goondoon St, the QCA did not reflect this change in its modelling of its ARR and 2020-21 indicative prices. As such, this has contributed to the difference between the QCA's 2020-21 indicative prices and GAWB's final prices.

### 2.1.3 QCA findings not accepted by GAWB

In determining prices that should apply from 1 July 2020, GAWB disagreed with a limited number of the QCA's findings in its Final Report. GAWB's positions on these matters were previously set out in its submissions to the QCA, including its initial submission<sup>25</sup> and subsequent response to the Draft Report<sup>26</sup>. That is, they were not new issues identified after the QCA released its Final Report.

#### *Long term inflation forecast*

In the determination of the ARR for the 2021-2025 regulatory period, forecast inflation over the regulatory period is used to roll-forward the RAB, escalate expenditure and smooth prices.

In its initial submission GAWB proposed a long-term inflation (CPI) forecast estimated by DAE, which was produced using its macroeconomic model of the Australian economy<sup>27</sup>. While the QCA's consultant, KPMG, proposed an updated estimate of the DAE forecast as part of its review of operating and capital expenditure, the QCA did express concerns regarding the use of these forecasts as they are based on a proprietary macroeconomic model. GAWB submitted that appropriate transparency is achieved via the QCA's review process, including

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<sup>22</sup> Gladstone Area Water Board (2020). p.43.

<sup>23</sup> Queensland Competition Authority (2020A). p.56.

<sup>24</sup> Gladstone Area Water Board (2020A). p.46.

<sup>25</sup> Gladstone Area Water Board (2019A).

<sup>26</sup> Gladstone Area Water Board (2020A).

<sup>27</sup> Deloitte Access Economics (2019). Cost Escalation Factors (2020-21 to 2024-25), Prepared for Gladstone Area Water Board, 15 August.

the scrutiny applied by KPMG, who did not raise any specific concerns with DAE's approach<sup>28</sup>. At the time of GAWB's 2021-25 price investigation, the QCA's preferred approach was to estimate a ten-year inflation forecast.

In its Final Report, the QCA used its (then) preferred approach to estimate a ten-year inflation forecast, which was based on a geometric average of the short-term inflation forecasts produced by the Reserve Bank of Australia (RBA) for the first two years and then the mid-point of the RBA's target inflation band (2.5%) for the remaining eight years. This resulted in an inflation forecast of 2.42%.

In finalising its prices for the 2021-25 regulatory period, GAWB sought advice from Synergies Economic Consulting (Synergies) regarding the appropriateness of the QCA's estimate and the methodology it applied.

As noted by Synergies, at that time a number of Australian regulators were grappling with the most appropriate approach to apply in forecasting inflation. Inflation had been persistently low and well below the mid-point of the RBA's target band. Regulators that were relying on approaches that applied a heavier weight to the RBA's mid-point of its target band for inflation (2.5%) were producing forecasts that systematically over-estimated actual inflation. This includes the approaches applied by the QCA and the Australian Energy Regulator (AER).

In June 2020, just two days after the QCA released its Final Report – and when GAWB was setting its final prices – the AER released its final decisions for Energex, Ergon Energy and SA Power Networks. In recognition of the issues presented at that time, the AER departed from its standard approach to forecast inflation<sup>29</sup>. While it was still based on a ten-year forecast using RBA data, the AER substituted the RBA's Trimmed Mean Inflation (TMI) forecast for headline inflation for the first two years of that forecast, resulting in an estimate of 2.27%.

This was largely done in recognition of the impacts of COVID-19 that were already clearly emerging at that time, with the TMI seen as better reflecting the RBA's expectations of core inflation as well as smoothing the transient volatility in CPI forecasts<sup>30</sup>. At the time, COVID-19 was already having a significant impact on inflation, which was driven by more extreme movements in prices of individual items such as food, fuel and energy. The TMI measure removes the impact of these extreme movements by taking a weighted average of the 'middle' 70% of price changes for all of the CPI components. It can therefore serve as a better measure of core underlying inflation in such circumstances.

The Synergies advice noted that the AER's revised forecast using the TMI was only slightly above GAWB's proposed forecast of 2.22%, which was DAE's updated forecast as at March 2020. It therefore considered that the AER's forecast of 2.27% was more reasonable than the QCA's forecast of 2.42%.

Having regard to the circumstances prevailing at the time, and the advice from Synergies, GAWB applied the AER's forecast of 2.27% in setting final prices. This still aligned with the QCA's preferred approach, being a ten-year average using RBA data. The only difference was the substitution of the RBA's TMI forecast for headline inflation in the first two years of that

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<sup>28</sup> Gladstone Area Water Board (2020A). pp.32-33.

<sup>29</sup> The AER was also undertaking a review of its approach to forecasting inflation at that time.

<sup>30</sup> Australian Energy Regulator (2020). Final Decision, Energex Distribution Determination 2020-2025, Attachment 3 Rate of Return, June, pp.3-8.

forecast. Importantly, the estimate relied upon was sourced from a (then) contemporaneous AER determination, which had also been through a rigorous public review and consultation process, with the AER similarly applying a methodology based on RBA data.

### *Inflation forecast – indexation rate for 2019-20*

In the determination of ARR for the 2021-25 regulatory period, forecast inflation for the 2019-20 year was used to index base year operating expenditure.

In its Final Report, the QCA escalated GAWB's 2018-19 operating expenditure to the start of the 2021-25 regulatory period (1 July 2020)<sup>31</sup>. The indexation applied was based on the RBA's short-term forecast of inflation for 2019-20, which resulted in an annual escalation factor of – 1.0%. GAWB engaged DAE to review the appropriateness of this approach along with the other escalation factors<sup>32</sup>.

DAE highlighted that the RBA's forecast is the percentage change over the year to the relevant quarter i.e., for 2019-20 it represents the forecast growth in the CPI as at June 2020 compared to the CPI in June 2019. This is referred to as 'year-end' growth.

The alternative to year-end growth is the 'year-average' measure. For 2019-20, this measures the growth in the average CPI for the four quarters of 2019-20 compared to growth in the average CPI for the four quarters of 2018-19. The RBA does not publish a year-average growth measure.

Typically, there are not significant differences between year-average and year-end growth measures. However, and as outlined above, at the time this matter was considered as part of the 2021-25 price investigation, there was significant volatility and uncertainty around inflation given the impact of COVID-19. DAE provided this advice to GAWB as input into the setting of its final prices (in June 2020) and at that time, there was expected to be a significant divergence between the year-end and year-average measures due to COVID-19 (with the year-end measure showing a more significant slowdown in inflation than the year-average measure).

Drawing on published CPI data to March 2020 and the RBA's June quarter estimate, DAE calculated an implied year-average RBA forecast for 2019-20 of 1.2%. This was more aligned with DAE's own 2019-20 forecast for CPI in Australia of 1.4%.

Based on its analysis and the unique market circumstances prevailing at the time, DAE advised GAWB that it was more appropriate to use the year-average measure as it best accounted for the change in price levels through the entire year. This was also seen as consistent with all other cost escalation advice it provided to GAWB and with other estimates considered reasonable by the QCA.

GAWB accepted this advice and applied DAE's implied year-average RBA forecast of 1.2% to escalate 2018-19 operating expenditure for the purpose of setting final prices.

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<sup>31</sup> Queensland Competition Authority (2020A). p.24.

<sup>32</sup> Deloitte Access Economics (2020). Cost escalation factors 2020-21 to 2024-25 – June 2020 update, Prepared for Gladstone Area Water Board.

### *Lake Awoonga recreational strategy*

In its Final Report the QCA advised that a contingency allowance for \$944,000 (\$2019-20) in capital costs should be excluded from the forecast capital expenditure for the Lake Awoonga recreational strategy<sup>33</sup>.

In its response to the Draft Report, GAWB explained that this expenditure was not in the typical nature of a contingency allowance that would normally be included in the budget for a capital project, but instead was for additional activities that had already been identified. GAWB also noted that the project budget, along with the additional allowance and its purpose, was explicitly discussed with its Community Consultative Forum and Customer Representative Panel members<sup>34</sup>.

Following the release of the QCA's Final Report GAWB maintained its position that the inclusion of these costs was appropriate. As outlined in the letter sent to each customer regarding the basis for GAWB's final prices from 1 July 2020 (refer section 4), the contingency is required for several activities that could not be quantified at the time, including addressing actions arising from a 2021 disability audit, upgrading the ablution facilities on the Boyne Valley and Benaraby sides of Lake Awoonga and to respond to new ideas raised by the community. GAWB therefore considered it reasonable to include the full contingency as:

- the costs of implementing actions arising from the disability audit were unknown;
- the Community Consultative Forum endorsed the full cost of the recreational strategy (i.e., inclusive of the contingency); and
- there is a community expectation that GAWB will deliver on all actions listed in the strategy.

As noted above, this is quite different to a contingency allowance often included in capital project forecasts e.g., to allow for general risks associated with changes in project scope and cost, which is typically based on a specified percentage of estimated costs.

GAWB therefore included the \$944,000 contingency allowance and applied total forecast expenditure of \$7.2 million (\$2019-20) for the Lake Awoonga recreational strategy in setting final prices.

### *Escalation of cost components (GL63201 and GL63202)*

In its determination of indicative prices, the QCA used CPI as an escalator for the cost components of Pooled Asset Purchases (GL63201) and Minor Assets (GL63202). Consistent with the approach applied in GAWB's original pricing submission and in its response to the QCA's Draft Report, GAWB maintained that these costs should be escalated by the 'other materials and services' factor. It therefore made this adjustment in the calculation of prices.

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<sup>33</sup> Queensland Competition Authority (2020A). p.68.

<sup>34</sup> Gladstone Area Water Board (2020A). p.51.

## 2.2 Impact of variations

To set GAWB's prices, a building block approach is used to calculate the total revenue requirement, i.e., the ARR for each year of the regulatory period. Prices are then determined based on the ARR and forecast demand.

To best explain the impact of these variations on prices, a comparison of the ARR over the five-year regulatory period has been provided. That is, GAWB has provided the total ARR required over the regulatory period, in Net Present Value (NPV) terms, used in the calculation of GAWB's final prices compared to the ARR determined by the QCA to support prices presented in its Final Report.

Table 2-2 provides the NPV of the ARR as at 1 July 2020 that supported the indicative prices recommended by the QCA, along with the NPV of the ARR used by GAWB to calculate its final prices<sup>35</sup>.

**Table 2-2: NPV of ARR (\$m) (2021\$s)**

	QCA Final ARR Estimate	GAWB's Final ARR
Excluding ARUR associated with Dam Wall Raising	276.41	283.96
Including ARUR associated with Dam Wall Raising	279.85	287.70

<sup>1</sup> Source: QCA, Copy of BB Model FD

<sup>2</sup> Source: GAWB calculations

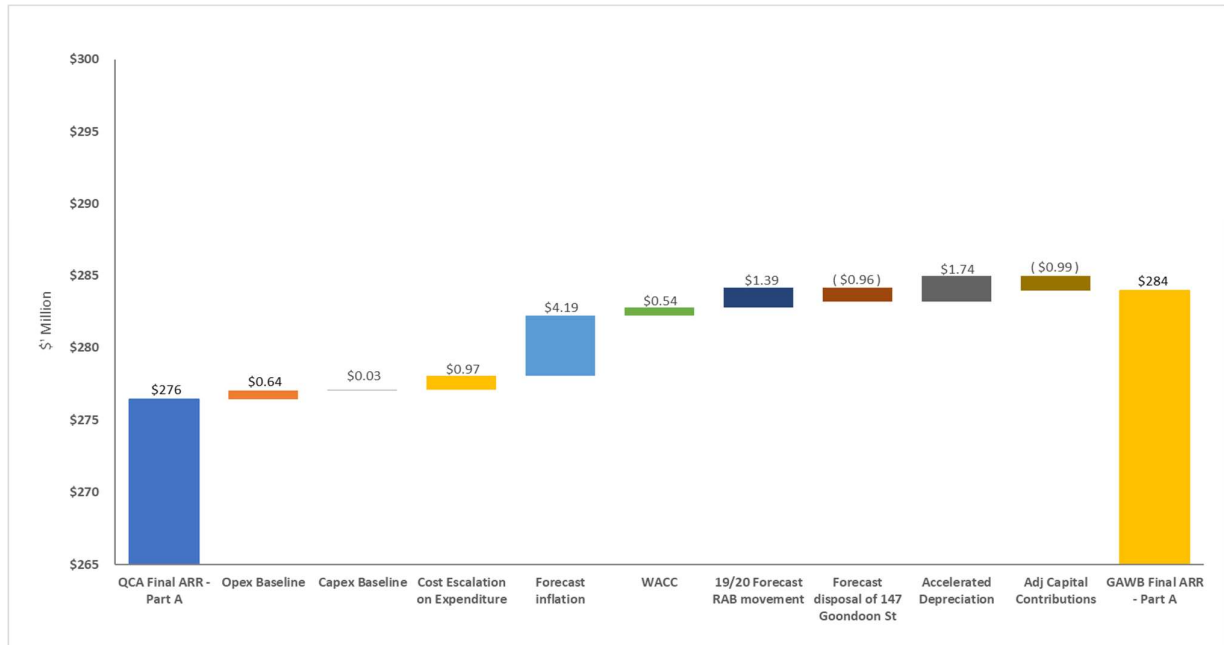
<sup>3</sup> ARRs are exclusive of the revenue requirement applicable to the Curtis Island Pricing Zone.

<sup>35</sup> The NPV for the QCA's ARR has been calculated assuming a discount rate based on the WACC it applied to determine its indicative prices (i.e. 4.72%), whereas the NPV for GAWB's ARR has been calculated assuming the updated WACC it used to set final prices (i.e. 4.74%) as described above.



Figure 2-1 presents the step changes to the ARR from the QCA's estimate to GAWB's final amount due to the variations set out above. These ARR amounts exclude that associated with the Curtis Island pricing zone.

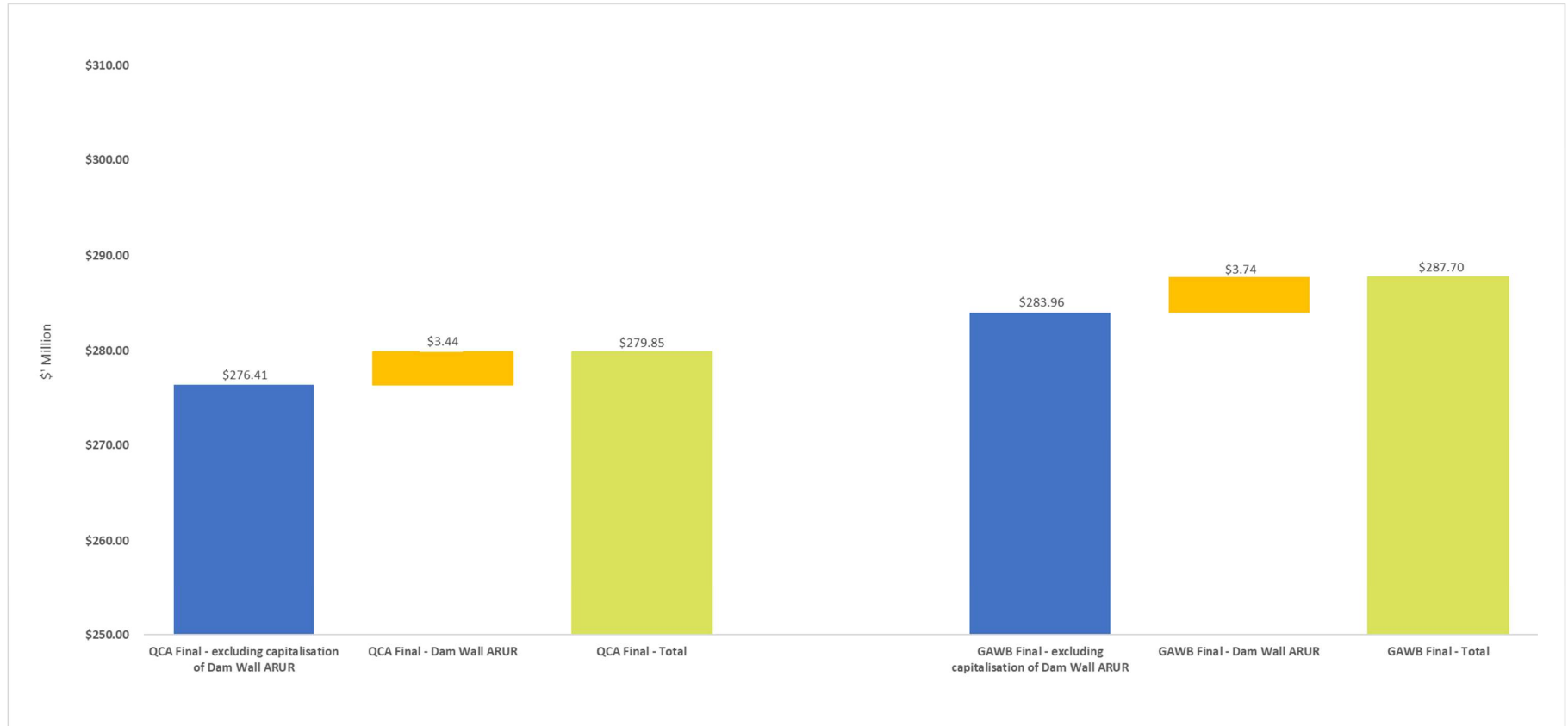
**Figure 2-1 Step changes in ARR (excluding Curtis Island)**



	Opex baseline	<ul style="list-style-type: none"> <li>Update of QCA levy (refer section 2.1.1)</li> <li>Update of insurance allowance (refer section 2.1.1)</li> <li>Use of GAWB's allocation methodologies for opex (refer section 2.1.2)</li> </ul>
	Capex baseline	<ul style="list-style-type: none"> <li>Adjustment to include full costs of Lake Awoonga recreational strategy (refer section 2.1.3)</li> </ul>
	Cost escalation on expenditure	<ul style="list-style-type: none"> <li>Adjustment of long term inflation rate to index opex and capex (refer section 2.1.3)</li> <li>Adjustment of 2019-20 forecast CPI to index opex (refer section 2.1.3)</li> <li>Adjustment of indexation of Professional Services (Engineering Services) (refer section 2.1.2), and GL63201 and GL63202 (refer section 2.1.3)</li> </ul>
	Forecast inflation	<ul style="list-style-type: none"> <li>Adjustment of long-term inflation forecast (refer section 2.1.3)</li> </ul>
	WACC	<ul style="list-style-type: none"> <li>Update to WACC parameters (refer section 2.1.1)</li> </ul>
	19/20 RAB movement	<ul style="list-style-type: none"> <li>Update RAB for actual asset capitalisation and disposals for 2019-20, excluding adjustment associated with 147 Goondoon St (refer section 2.1.1)</li> </ul>
	147 Goondoon St	<ul style="list-style-type: none"> <li>Adjustment for forecast disposal value of 147 Goondoon St Gladstone (refer section 2.1.2)</li> </ul>
	Accelerated depreciation	<ul style="list-style-type: none"> <li>Updated for actual asset disposals for 2019-20 (refer section 2.1.1)</li> <li>Adjustment for inclusion of forecast disposal of 147 Goondoon St (refer section 2.1.2)</li> </ul>
	Adj Capital Contribution	<ul style="list-style-type: none"> <li>Update of forecast demand (refer section 2.1.1) which impacts the capital contribution rebates</li> </ul>

Figure 2-2 shows the impact on the ARR of the capitalisation of the ARUR associated with the raising of the Awoonga Dam wall, excluding Curtis Island, based on the QCA's indicative ARR and GAWB's ARR used to set its final prices. This is presented as the NPV of the ARR, as at 1 July 2020, across the 2021-25 regulatory period.

**Figure 2-2 Impact on ARR of capitalisation of ARUR associated with the Awoonga Dam wall raising, excluding Curtis Island pricing zone**



### **3. Accumulated Revenue Under-Recovery**

*One of the key issues the QCA was directed to provide advice on under the Referral Notice was GAWB's ARUR. GAWB has implemented the QCA's findings from its Final Report in relation to the ARUR. GAWB has consulted with each customer to agree and confirm repayment terms in accordance with the QCA's findings, as summarised below.*

### 3.1 QCA findings - ARUR

Since GAWB's first price investigation in the early 2000's up to 30 June 2020, GAWB has been charging prices that have not recovered the full prudent and efficient costs of its bulk water services. This had resulted in an under recovery of revenue of \$124.7 million as at 1 July 2020.

The QCA, in its Final Report, found that GAWB was able to recover the current value of the ARUR from its customers from 1 July 2020 via two components. These components, and the methods to recover them, were:

- **ARUR associated with the 2002 Raising of Awoonga Dam Wall** (representing \$23.08 million)  
This component to be capitalised into GAWB's RAB and recovered via bulk water charges from 1 July 2020 over the remaining asset life of Awoonga Dam<sup>36</sup>. GAWB has given effect to this part of the QCA's finding and the bulk water charges that commenced on 1 July 2020 assume the recovery of this component.
- **Remainder of the ARUR** (representing \$101.61 million)  
The remainder of the ARUR to be recovered from existing customers as an additional charge to GAWB's bulk water charges<sup>37</sup>.

The QCA outlined that customers with a positive ARUR amount (i.e. the customer owes GAWB), would be required to repay their ARUR amount by way of an annuity on the following default terms, if GAWB and the customer did not agree alternative repayment terms:

- for industrial customers, the repayment term is 30 years<sup>38</sup>;
- for Gladstone Regional Council (GRC), the repayment term is 100 years<sup>39</sup>;
- the annuity to apply to each 5-year regulatory period, will use the regulated cost of debt as the applicable interest rate<sup>40</sup>; and
- payment of the annuity to commence from 1 July 2022<sup>41</sup>.

### 3.2 Customer engagement

Following the conclusion of the 2020 price monitoring investigation, GAWB provided all customers with a letter notifying them of the changes to their water supply arrangements coming out of the 2020 price monitoring review. This included the revised Pricing Principles

<sup>36</sup> Queensland Competition Authority (2020B). p.17

<sup>37</sup> Queensland Competition Authority (2020B). p.13

<sup>38</sup> Queensland Competition Authority (2020B). p.23

<sup>39</sup> Queensland Competition Authority (2020B). p.23

<sup>40</sup> Queensland Competition Authority (2020B). p.24

<sup>41</sup> The QCA's finding specified an annuity payment starting from 1 July 2020 would be appropriate. Refer: Queensland Competition Authority (2020B). p.24.

that detail the provisions dealing with the repayment of the ARUR, including the default repayment terms.

In 2021, GAWB provided all customers who had a positive ARUR amount, with a letter detailing:

- the QCA's findings with regard to the ARUR;
- each customer's specific ARUR amount;
- the associated annual annuity payment under the default payment terms; and
- an invitation to meet to discuss the ARUR amount and whether the customer would like to agree alternative payment arrangements with GAWB.

Following this, GAWB successfully agreed arrangements with a number of customers who were seeking alternative payment arrangements. The details of customers' repayment arrangements are commercial in confidence.

For those customers who had a negative ARUR amount (i.e., GAWB owed the customer), this money was refunded to customers in July 2022.

## 4. Customer Engagement

*Customer engagement was a key focus for GAWB leading up to and during the 2020 price monitoring investigation. This included providing customers and stakeholders with periodic updates throughout the process and at the conclusion of the review with the aim to increase customer awareness and understanding of the regulatory framework applicable to GAWB, the QCA's findings, the areas where GAWB had deviated from those findings and the resultant prices that were to apply from 1 July 2020. GAWB has continued to actively engage with customers since the conclusion of the 2020 price monitoring review.*

## 4.1 Price reset

At the completion of the 2020 pricing monitoring investigation, GAWB conducted individual information sessions for all GAWB's industrial customers, GRC and GAWB's Community Consultative Forum summarising the outcomes of the QCA's price investigation. These information sessions included an explanation of the differences between the QCA's ARR used to support the indicative prices presented in its Final Report and GAWB's ARR used in the calculation of final prices to apply from 1 July 2020, as well as the QCA findings related to the ARUR and the indicative bill impact for individual customers resulting from the price review.

Prior to the introduction of the new prices, GAWB provided all industrial customers and GRC with a letter setting out:

- a comparison between GAWB's final prices by pricing zone and the indicative prices set out in the QCA's Final Report for 2020-21;
- the bulk water prices that would apply from 1 July 2020 and the relevant reservations for the regulatory period (i.e., 1 July 2020 – 30 June 2025) for the customer's delivery point/s;
- an estimate of the resultant increase in the customer's charges (based on an estimate of the customer's 2019-20 water charges); and
- an explanation of the drivers of the differences between GAWB's ARR that supported its final prices and the QCA's ARR used to determine its indicative prices in its Final Report.

As part of this letter, customers were offered copies of relevant external advice received by GAWB following the release of the QCA's Final Report, that it had relied on to support GAWB's determination of the prices to apply from 1 July 2020<sup>42</sup>. GAWB did not subsequently receive any requests from customers for the reports, nor were any further queries received in relation to GAWB's final pricing outcomes.

## 4.2 Annual indexation of prices

As provided for in GAWB's water supply arrangements with customers, prior to the start of each subsequent year following a price review, GAWB notifies each customer of the annual

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<sup>42</sup> These were the reports from Deloitte Access Economics and Synergies Economic Consulting that were commissioned by GAWB in response to the QCA's Final Report and were subsequently relied upon by GAWB in determining final prices, as referred to in section 2.

indexation that will be applied to prices from 1 July of the following financial year. This includes an explanation of the indexation approach that has been used.

Letters have been provided to customers in:

- June 2021, updating GAWB’s final 2020-21 prices for CPI to arrive at the prices to apply in 2021-22; and
- June 2022, updating GAWB’s final 2021-22 prices for CPI to arrive at the prices to apply in 2022-23.

In June 2023, GAWB also advised customers of the annual price update for the 2023-24 year.

### 4.3 Stakeholder submission

On 16 February 2023 the QCA invited submissions from stakeholders on its mid-term review. One submission was made by CS Energy. It submitted that the following areas should be addressed in the QCA’s mid-term report:

- the quantum of GAWB’s revenue under-recovery that has been recovered to date;
- an update on KPMG’s suggested approach in relation to GAWB’s Lifecycle Management Plans and maintenance strategies;
- actual demand against forecast; and
- updates on the capex program, operating expenditure and revenue recovery “to anticipate potential accumulated over or under recovery”<sup>43</sup>.

GAWB welcomes the input provided by CS Energy.

In response to the points raised in CS Energy’s submission, GAWB notes that under the terms of the Referral Notice, the intent of this review (within GAWB’s price monitoring framework) is a comparison of the actual final prices set by GAWB for the current regulatory period against the QCA’s indicative prices, including GAWB’s explanation of any deviations. It is not intended to review the underlying inputs used to set those prices.

Importantly, as outlined above, GAWB currently undertakes annual engagement with customers as part of updating prices for CPI. Additionally, each year since the conclusion of the 2020 price monitoring investigation, GAWB has provided all customers with the opportunity to meet to present an update on key issues. This includes GAWB’s progress on the delivery of significant capital projects over the preceding financial year and its performance against capital expectations set during the 2020 price monitoring review. These meetings also provide customers with the opportunity to raise with GAWB any technical or commercial issues they may have.

Additionally, GAWB’s annual report (including its audited financial statements), which is publicly available, also provides information on GAWB’s:

- actual water sales;
- capital works program; and

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<sup>43</sup> CS Energy (2023). Gladstone Area Water Board price monitoring – mid term review.



- actual operating expenditure.

In terms of any “potential accumulated over or under recovery”, the changes advised by the QCA (and implemented by GAWB) for the 2021-25 regulatory period are intended to prevent any future accumulation of any under-recovered revenue in accordance with the Referral Notice.

## **5. Price Comparisons**

*This section presents the comparisons between the QCA's indicative prices and GAWB's final prices for the 2020-21 year, as well as GAWB's final prices for 2021-22 and 2022-23 (noting that the QCA did not publish indicative prices for those years). For each year, two sets of prices are provided – one exclusive and one inclusive of the ARUR associated with the Awoonga Dam raising. The comparisons exclude the Curtis Island pricing zone.*

## 5.1 Indexation of prices

As provided for in GAWB's water supply arrangements with customers, prices are indexed annually in subsequent years following a price review with reference to the All Groups Brisbane CPI published for the relevant March quarters. GAWB therefore indexes prices based on the following calculation:

$$\text{Price}_{x+1} = \text{Price}_x \times \frac{\text{CPI (All Groups Brisbane March}_{x+1})}{\text{CPI (All Groups Brisbane March}_x)}$$

The March indices and the subsequent annual indexation (i.e., percentage change) applied to determine prices for the 2021-22 and 2022-23 years are shown in Table 5-1.

**Table 5-1 Annual CPI indexation applied to prices**

Quarter	All Groups Brisbane CPI	Annual Indexation (% change)
March 2020	116.2	
March 2021	118.2	1.7212%
March 2022	125.3	6.0068%

## 5.2 Comparison of prices

In its Final Report, the QCA only published indicative prices for the first year of the 2021-25 regulatory period (i.e., 2020-21). This section presents a comparison between the QCA's indicative prices and GAWB's final prices by pricing zone for 2020-21, along with GAWB's final prices for 2021-22 and 2022-23.

### 5.2.1 Price comparisons: 2020-21

#### *Prices exclusive of the ARUR associated with the Awoonga Dam raising*

The price comparisons for the 2020-21 year in Table 5-2 are exclusive of the ARUR associated with the Awoonga Dam raising. The QCA's indicative prices are as published in Part A of its Final Report<sup>44</sup>. GAWB's final prices are as advised to customers.

**Table 5-2: 2020-21 – QCA Indicative and GAWB Final Prices: Exclusive of ARUR**

Pricing zone	QCA INDICATIVE PRICES					GAWB FINAL PRICES				
	Storage access (\$/reserved ML)	Storage volumetric (\$/metered ML)	Delivery access (monthly, \$/reserved MDQ) <sup>1</sup>	Delivery volumetric (\$/metered ML)	Administration (\$/reserved ML)	Storage access (\$/reserved ML)	Storage volumetric (\$/metered ML)	Delivery access (monthly \$/reserved MDQ) <sup>1</sup>	Delivery volumetric (\$/metered ML)	Administration (\$/reserved ML)
Awoonga	351.60	1.71	-	-	30.86	375.42	1.84	-	-	35.99
Awoonga to Toolooa	351.60	1.71	6,046.48	32.93	92.58	375.42	1.84	6,623.11	35.72	107.98

<sup>44</sup> Queensland Competition Authority (2020A) p.133.

	QCA INDICATIVE PRICES					GAWB FINAL PRICES				
Toooloa to Fitzsimmons	351.60	1.71	7,645.91	32.93	92.58	375.42	1.84	8,394.08	35.72	107.98
Boyne Raw	351.60	1.71	10,330.18	32.93	92.58	375.42	1.84	12,213.18	35.72	107.98
Central Raw	351.60	1.71	9,467.34	32.94	92.58	375.42	1.84	10,547.93	35.72	107.98
Fitzsimmons to Gladstone	351.60	1.71	8,154.89	32.93	92.58	375.42	1.84	8,928.21	35.72	107.98
QAL	351.60	1.71	9,840.13	32.93	92.58	375.42	1.84	10,854.97	35.72	107.98
Fisherman's Landing Raw	351.60	1.71	13,274.38	33.52	92.58	375.42	1.84	14,710.37	36.35	107.98
Gladstone WTP	351.60	1.71	23,548.62	111.83	216.02	375.42	1.84	24,013.32	120.63	251.95
Gladstone City	351.60	1.71	26,745.24	111.83	216.02	375.42	1.84	27,146.85	120.63	251.95
Gladstone WTP to South Gladstone	351.60	1.71	28,169.00	111.87	216.02	375.42	1.84	28,592.69	120.68	251.95
Calliope	351.60	1.71	40,531.29	127.08	216.02	375.42	1.84	42,842.88	138.83	251.95

	QCA INDICATIVE PRICES					GAWB FINAL PRICES				
South Gladstone to Toolooa	351.60	1.71	36,446.41	114.90	216.02	375.42	1.84	37,003.86	123.93	251.95
Boyne Potable	351.60	1.71	43,968.85	115.19	216.02	375.42	1.84	44,950.67	124.24	251.95
Benaraby	351.60	1.71	66,615.50	138.01	216.02	375.42	1.84	64,226.58	148.99	251.95
Yarwun WTP	351.60	1.71	32,399.83	107.98	216.02	375.42	1.84	34,474.20	116.68	251.95
North Industrial Potable	351.60	1.71	38,793.46	109.27	216.02	375.42	1.84	40,215.14	118.00	251.95
Fisherman's Landing Potable	351.60	1.71	55,926.59	109.27	216.02	375.42	1.84	67,703.93	118.00	251.95
Boat Creek to East End	351.60	1.71	91,009.93	292.33	216.02	375.42	1.84	83,193.45	316.32	251.95

<sup>1</sup> Delivery access charges are shown as monthly amounts (\$/MDQ). The annual \$/MDQ price is 12 times this monthly amount.

### Prices inclusive of the ARUR associated with the Awoonga Dam raising

The price comparisons for the 2020-21 year in Table 5-3 are inclusive of the ARUR associated with the Awoonga Dam raising. The QCA's indicative prices are as published in Part B of its Final Report<sup>45</sup>. GAWB's final prices are as advised to customers.

**Table 5-3: 2020-21 – QCA Indicative and GAWB Final Prices: Inclusive of ARUR**

Pricing zone	QCA INDICATIVE PRICES					GAWB FINAL PRICES				
	Storage access (\$/reserved ML)	Storage volumetric (\$/metered ML)	Delivery access (monthly, \$/reserved MDQ) <sup>1</sup>	Delivery volumetric (\$/metered ML)	Administration (\$/reserved ML)	Storage access (\$/reserved ML)	Storage volumetric (\$/metered ML)	Delivery access (monthly, \$/reserved MDQ) <sup>1</sup>	Delivery volumetric (\$/metered ML)	Administration (\$/reserved ML)
Awoonga	363.61	1.71	-	-	30.86	388.87	1.84	-	-	35.99
Awoonga to Toolooa	363.61	1.71	6,046.73	32.93	92.58	388.87	1.84	6,622.92	35.72	107.98
Toolooa to Fitzsimmons	363.61	1.71	7,646.21	32.93	92.58	388.87	1.84	8,393.86	35.72	107.98
Boyne Raw	363.61	1.71	10,330.70	32.93	92.58	388.87	1.84	12,212.75	35.72	107.98
Central Raw	363.61	1.71	9,467.74	32.94	92.58	388.87	1.84	10,547.61	35.72	107.98
Fitzsimmons to Gladstone	363.61	1.71	8,155.18	32.93	92.58	388.87	1.84	8,927.98	35.72	107.98

<sup>45</sup> Queensland Competition Authority (2020B) pp.32-33.

	QCA INDICATIVE PRICES					GAWB FINAL PRICES				
QAL	363.61	1.71	9,840.48	32.93	92.58	388.87	1.84	10,854.70	35.72	107.98
Fisherman's Landing Raw	363.61	1.71	13,274.97	33.52	92.58	388.87	1.84	14,709.92	36.35	107.98
Gladstone WTP	363.61	1.71	23,549.11	111.83	216.02	388.87	1.84	24,012.96	120.63	251.94
Gladstone City	363.61	1.71	26,745.76	111.83	216.02	388.87	1.84	27,146.48	120.63	251.94
Gladstone WTP to South Gladstone	363.61	1.71	28,169.61	111.87	216.02	388.87	1.84	28,592.24	120.68	251.94
Calliope	363.61	1.71	40,532.51	127.08	216.02	388.87	1.84	42,841.96	138.83	251.94
South Gladstone to Toolooa	363.61	1.71	36,447.29	114.90	216.02	388.87	1.84	37,003.24	123.93	251.94
Boyne Potable	363.61	1.71	43,970.04	115.19	216.02	388.87	1.84	44,949.83	124.24	251.94
Benaraby	363.61	1.71	66,617.25	138.01	216.02	388.87	1.84	64,225.41	148.99	251.94
Yarwun WTP	363.61	1.71	32,400.68	107.98	216.02	388.87	1.84	34,473.57	116.68	251.94



	QCA INDICATIVE PRICES					GAWB FINAL PRICES				
North Industrial Potable	363.61	1.71	38,794.63	109.27	216.02	388.87	1.84	40,214.30	118.00	251.94
Fisherman's Landing Potable	363.61	1.71	55,928.50	109.27	216.02	388.87	1.84	67,702.27	118.00	251.94
Boat Creek to East End	363.61	1.71	91,013.78	292.33	216.02	388.87	1.84	83,191.18	316.32	251.94

<sup>1</sup> Delivery access charges are shown as monthly amounts (\$/MDQ). The annual \$/MDQ price is 12 times this monthly amount.

## 5.2.2 GAWB's final prices: 2021-22

### *Prices exclusive of the ARUR associated with the Awoonga Dam raising*

GAWB's prices for the 2021-22 year in Table 5-4 are exclusive of the ARUR associated with the Awoonga Dam raising. GAWB's 2020-21 prices were indexed by the annual movement in actual All Groups Brisbane CPI (i.e., 1.7212%) to obtain prices for the 2021-22 year, as advised to customers.

**Table 5-4: 2021-22 GAWB Final Prices: Exclusive of ARUR**

Pricing zone	Storage access (\$/reserved ML)	Storage volumetric (\$/metered ML)	Delivery access (monthly, \$/reserved MDQ) <sup>1</sup>	Delivery volumetric (\$/metered ML)	Administration (\$/reserved ML)
Awoonga	381.88	1.87	-	-	36.61
Awoonga to Toolooa	381.88	1.87	6,737.11	36.33	109.84
Toolooa to Fitzsimmons	381.88	1.87	8,538.56	36.33	109.84
Boyne Raw	381.88	1.87	12,423.39	36.33	109.84
Central Raw	381.88	1.87	10,729.48	36.33	109.84
Fitzsimmons to Gladstone	381.88	1.87	9,081.88	36.33	109.84
QAL	381.88	1.87	11,041.80	36.33	109.84
Fisherman's Landing Raw	381.88	1.87	14,963.56	36.98	109.84
Gladstone WTP	381.88	1.87	24,426.63	122.71	256.29
Gladstone City	381.88	1.87	27,614.09	122.71	256.29
Gladstone WTP to South Gladstone	381.88	1.87	29,084.82	122.76	256.29
Calliope	381.88	1.87	43,580.28	141.22	256.29

Pricing zone	Storage access (\$/reserved ML)	Storage volumetric (\$/metered ML)	Delivery access (monthly, \$/reserved MDQ) <sup>1</sup>	Delivery volumetric (\$/metered ML)	Administration (\$/reserved ML)
South Gladstone to Toolooa	381.88	1.87	37,640.76	126.06	256.29
Boyne Potable	381.88	1.87	45,724.35	126.38	256.29
Benaraby	381.88	1.87	65,332.03	151.55	256.29
Yarwun WTP	381.88	1.87	35,067.56	118.69	256.29
North Industrial Potable	381.88	1.87	40,907.31	120.03	256.29
Fisherman's Landing Potable	381.88	1.87	68,869.23	120.03	256.29
Boat Creek to East End	381.88	1.87	84,625.35	321.76	256.29

<sup>1</sup> Delivery access charges are shown as monthly amounts (\$/MDQ). The annual \$/MDQ price is 12 times this monthly amount.

*Prices inclusive of the ARUR associated with the Awoonga Dam raising*

GAWB's prices for the 2021-22 year in Table 5-5 are inclusive of the ARUR associated with the Awoonga Dam raising. GAWB's 2020-21 prices were indexed by the annual movement in actual All Groups Brisbane CPI (i.e., 1.7212%) to obtain prices for the 2021-22 year, as advised to customers.

**Table 5-5: 2021-22 GAWB Final Prices: Inclusive of ARUR**

Pricing zone	Storage access (\$/reserved ML)	Storage volumetric (\$/metered ML)	Delivery access (monthly, \$/reserved MDQ) <sup>1</sup>	Delivery volumetric (\$/metered ML)	Administration (\$/reserved ML)
Awoonga	395.56	1.87	-	-	36.61
Awoonga to Toolooa	395.56	1.87	6,736.91	36.33	109.84
Toolooa to Fitzsimmons	395.56	1.87	8,538.33	36.33	109.84
Boyne Raw	395.56	1.87	12,422.95	36.33	109.84
Central Raw	395.56	1.87	10,729.15	36.33	109.84
Fitzsimmons to Gladstone	395.56	1.87	9,081.65	36.33	109.84
QAL	395.56	1.87	11,041.53	36.33	109.84
Fisherman's Landing Raw	395.56	1.87	14,963.10	36.98	109.84
Gladstone WTP	395.56	1.87	24,426.26	122.71	256.28
Gladstone City	395.56	1.87	27,613.72	122.71	256.28
Gladstone WTP to South Gladstone	395.56	1.87	29,084.36	122.76	256.28
Calliope	395.56	1.87	43,579.34	141.22	256.28
South Gladstone to Toolooa	395.56	1.87	37,640.13	126.06	256.28

Pricing zone	Storage access (\$/reserved ML)	Storage volumetric (\$/metered ML)	Delivery access (monthly, \$/reserved MDQ) <sup>1</sup>	Delivery volumetric (\$/metered ML)	Administration (\$/reserved ML)
Boyne Potable	395.56	1.87	45,723.49	126.38	256.28
Benaraby	395.56	1.87	65,330.84	151.55	256.28
Yarwun WTP	395.56	1.87	35,066.92	118.69	256.28
North Industrial Potable	395.56	1.87	40,906.46	120.03	256.28
Fisherman's Landing Potable	395.56	1.87	68,867.54	120.03	256.28
Boat Creek to East End	395.56	1.87	84,623.04	321.76	256.28

<sup>1</sup> Delivery access charges are shown as monthly amounts (\$/MDQ). The annual \$/MDQ price is 12 times this monthly amount.

### 5.2.3 GAWB's final prices: 2022-23

#### *Prices exclusive of the ARUR associated with the Awoonga Dam raising*

GAWB's prices for the 2022-23 year in Table 5-6 are exclusive of the ARUR associated with the Awoonga Dam raising. GAWB's 2021-22 prices were indexed by the annual movement in actual All Groups Brisbane CPI (i.e., 6.0068%) to obtain prices for the 2022-23 year, as advised to customers.

**Table 5-6: 2022-23 GAWB Final Prices: Exclusive of ARUR**

Pricing zone	Storage access (\$/reserved ML)	Storage volumetric (\$/metered ML)	Delivery access (monthly, \$/reserved MDQ) <sup>1</sup>	Delivery volumetric (\$/metered ML)	Administration (\$/reserved ML)
Awoonga	404.82	1.98	-	-	38.81
Awoonga to Toolooa	404.82	1.98	7,141.79	38.51	116.44
Toolooa to Fitzsimmons	404.82	1.98	9,051.45	38.51	116.44
Boyne Raw	404.82	1.98	13,169.63	38.51	116.44
Central Raw	404.82	1.98	11,373.97	38.51	116.44
Fitzsimmons to Gladstone	404.82	1.98	9,627.41	38.51	116.44
QAL	404.82	1.98	11,705.06	38.51	116.44
Fisherman's Landing Raw	404.82	1.98	15,862.39	39.20	116.44
Gladstone WTP	404.82	1.98	25,893.88	130.08	271.68
Gladstone City	404.82	1.98	29,272.80	130.08	271.68
Gladstone WTP to South Gladstone	404.82	1.98	30,831.88	130.13	271.68
Calliope	404.82	1.98	46,198.05	149.70	271.68

Pricing zone	Storage access (\$/reserved ML)	Storage volumetric (\$/metered ML)	Delivery access (monthly, \$/reserved MDQ) <sup>1</sup>	Delivery volumetric (\$/metered ML)	Administration (\$/reserved ML)
South Gladstone to Toolooa	404.82	1.98	39,901.75	133.63	271.68
Boyne Potable	404.82	1.98	48,470.91	133.97	271.68
Benaraby	404.82	1.98	69,256.37	160.65	271.68
Yarwun WTP	404.82	1.98	37,173.99	125.82	271.68
North Industrial Potable	404.82	1.98	43,364.52	127.24	271.68
Fisherman's Landing Potable	404.82	1.98	73,006.05	127.24	271.68
Boat Creek to East End	404.82	1.98	89,708.60	341.09	271.68

<sup>1</sup> Delivery access charges are shown as monthly amounts (\$/MDQ). The annual \$/MDQ price is 12 times this monthly amount.

*Prices inclusive of the ARUR associated with the Awoonga Dam raising*

GAWB's prices for the 2022-23 year in Table 5-7 are inclusive of the ARUR associated with the Awoonga Dam raising. GAWB's 2021-22 prices have been indexed by the annual movement in actual All Groups Brisbane CPI (i.e., 6.0068%) to obtain prices for the 2022-23 year, as advised to customers.

**Table 5-7: 2022-23 GAWB Final Prices: Inclusive of ARUR**

Pricing zone	Storage access (\$/reserved ML)	Storage volumetric (\$/metered ML)	Delivery access (monthly, \$/reserved MDQ) <sup>1</sup>	Delivery volumetric (\$/metered ML)	Administration (\$/reserved ML)
Awoonga	419.32	1.98	-	-	38.81
Awoonga to Toolooa	419.32	1.98	7,141.58	38.51	116.44
Toolooa to Fitzsimmons	419.32	1.98	9,051.21	38.51	116.44
Boyne Raw	419.32	1.98	13,169.17	38.51	116.44
Central Raw	419.32	1.98	11,373.63	38.51	116.44
Fitzsimmons to Gladstone	419.32	1.98	9,627.16	38.51	116.44
QAL	419.32	1.98	11,704.77	38.51	116.44
Fisherman's Landing Raw	419.32	1.98	15,861.90	39.20	116.44
Gladstone WTP	419.32	1.98	25,893.49	130.08	271.67
Gladstone City	419.32	1.98	29,272.41	130.08	271.67
Gladstone WTP to South Gladstone	419.32	1.98	30,831.39	130.13	271.67
Calliope	419.32	1.98	46,197.05	149.70	271.67
South Gladstone to Toolooa	419.32	1.98	39,901.09	133.63	271.67



Pricing zone	Storage access (\$/reserved ML)	Storage volumetric (\$/metered ML)	Delivery access (monthly, \$/reserved MDQ) <sup>1</sup>	Delivery volumetric (\$/metered ML)	Administration (\$/reserved ML)
Boyne Potable	419.32	1.98	48,469.99	133.97	271.67
Benaraby	419.32	1.98	69,255.11	160.65	271.67
Yarwun WTP	419.32	1.98	37,173.31	125.82	271.67
North Industrial Potable	419.32	1.98	43,363.62	127.24	271.67
Fisherman's Landing Potable	419.32	1.98	73,004.25	127.24	271.67
Boat Creek to East End	419.32	1.98	89,706.15	341.09	271.67

<sup>1</sup> Delivery access charges are shown as monthly amounts (\$/MDQ). The annual \$/MDQ price is 12 times this monthly amount.