BULK WATER Phice Review

GAWB SUBMISSION 2021-25 Period Part B Confidential



Gladstone Area
Water Board

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Abbreviations

ABS	Australian Bureau of Statistics
ACCC	Australian Competition and Consumer Commission
ADA	Aquaculture Development Areas
AER	Australian Energy Regulator
AFC	Acceptable Flood Capacity
AIC	Average Incremental Cost
ANCOLD	Australian National Committee on Large Dams
ARR	Annual Revenue Requirement
ASX	Australian Stock Exchange
CAPM	Capital Asset Pricing Model
CCF	Community Consultative Forum
CPI	Consumer Price Index
CRP	Customer Representative Panel
CSS	Contingent Supply Strategy
CUIA	Common Use Infrastructure Agreement
DAE	Deloitte Access Economics
DAEM	Deloitte Access Economics Macroeconomic Model
DGMs	Dividend Growth Models
DNRME	Department of Natural Resources Mines and Energy
DWQMP	Drinking Water Quality Management Plan
EAP	Emergency Action Plan
EIS	Environmental Impact Statement
ERA	Economic Regulation Authority Western Australia
ERP	Enterprise Resource Planning
ESC	Essential Services Commission
ESCOSA	Essential Services Commission of South Australia
FTE	Full Time Equivalent
GAWB	Gladstone Area Water Board
GFC	Global Financial Crisis
GFP	Gladstone to Fitzroy Pipeline
GPCL	Gladstone Ports Corporation Limited
GRC	Gladstone Regional Council

CWAD	Cladatana Watar Traatmant Dlant
GWTP	Gladstone Water Treatment Plant
HNFY	Historical No Failure Annual Yield
IAC	Infrastructure Availability Charges
ICRC	Independent Competition and Regulatory Commission
ICT	Information and Communication Technologies
IDC	Interest During Construction
IPART	Independent Pricing and Regulatory Tribunal
ISO	International Organisation for Standardisation
LCMP	Life Cycle Management Plans
LNG	Liquified Natural Gas
LRMC	Long Run Marginal Cost
М	Million
MDQ	Maximum Daily Quantity
ML	Megalitre
MRP	Market Risk Premium
NWI	National Water Initiative
OTTER	The Office of the Tasmanian Economic Regulator
p.a.	Per annum
PMF	Probable Maximum Flood
РМВОК	Project Management Body of Knowledge
PMS	Project Management System
PoE	Probability of Exceedance
PREMO	Performance, Risk, Engagement, Management and Outcomes
QCA	Queensland Competition Authority
RAB	Regulated Asset Base
RAS	Recirculating Aquaculture System
RBA	Reserve Bank of Australia
ROL	Resource Operations Licence
ROP	Resource Operating Plan
SDP	Sydney Desalination Plant
SEQ	South East Queensland
SRMC	Short Run Marginal Cost
USD	United States Dollar
UT5	2017 Access Undertaking
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Utilities Commission	Northern Territory Utilities Commission
WACC	Weighted Average Cost of Capital
WPI	Wage Price Index

1. Overview

Part B, clause 1.3 of the Referral Notice, requires the QCA to provide advice on measures that prevent the further accumulation of under-recovered revenue and to reduce the existing balance of accumulated revenue under-recoveries. In recognition of this obligation, GAWB has identified a set of measures that it believes best addresses these obligations. GAWB's proposed approach to:

- prevent the further accumulation of under-recovered revenue is set out in Part A of the Regulatory Submission; and
- repayment of current levels of accumulated revenue under-recoveries is detailed below (i.e. in Part B of the Regulatory Submission).

The repayment of the accumulated revenue under-recovery is a matter relevant to existing customers. Any measures introduced to address the requirements of clauses 1.3(b) and (c) will be in addition to, and entirely separate from, prices for the 2021-25 pricing period (as set out in Part A of the Regulatory Submission).

1.1 Overview

Under the current regulatory framework, GAWB's bulk water prices are reviewed by the QCA periodically, typically every 5 years. This process is conducted in accordance with the Referral Notice (issued by the Queensland Government) and the principles of economic regulation. That is, the QCA has regard to the building block approach when calculating GAWB's yearly allowable revenue requirement (ARR). These building blocks - operating expenditure, return on capital, return of capital and tax - are estimates of the efficient costs GAWB needs to incur in providing the regulated services to customers over the regulatory period.

Under the QCA's current price smoothing approach, prices are then calculated to recover GAWB's efficient costs over the 20 year planning period, with prices to remain constant (i.e. in real terms) over the pricing period.

However, with the perpetual resetting of the 20-year price path every 5 years, which includes the rolling in of the accumulated under-recovery, the recovery of the full costs associated with servicing the demand of existing (and past) users is being deferred. This outcome is increasing the burden on future users and reduces the desirability of the Gladstone region as a location for future investment.

A fair or equitable outcome may mean different things for different users or stakeholders. However, the current situation where future users are being relied upon to fully recover the costs of servicing current users, clearly contravenes any concept of fairness. Indeed, it could lead to the situation where prices are so high that it will discourage future investment in the Gladstone region (i.e. new demand).

For these reasons, GAWB supports the alignment of the regulatory and price smoothing period and the use of a 5 year smoothing period to set prices. As outlined in Part A of the Regulatory Submission, this will stop the under-recovery from growing and ensure the prices paid by current users are a true reflection of the cost incurred to deliver the required services. Since the framework was implemented¹, GAWB has under-recovered its ARR in most years. The accumulated under-recovery has grown exponentially in recent regulatory periods; reaching \$124.7 million as at 1 July 2020. Due to the way the 20 year price smoothing mechanism has been applied, in that it does not separate the costs of the Awoonga Dam augmentation investment from all other costs and allowances, existing customers are not paying a price that reflects the full cost of supplying the regulated service.

The recovery of the accumulated under-recovery should be consistent with economic principles. That is the user of a service, or the individual that caused the costs to be incurred (the impactor), should pay the relevant costs². Similarly, consideration should be given to users who have benefited from the provision of the services and/or infrastructure.

¹ Queensland Competition Authority. 2002. *Gladstone Area Water Board: Investigation of Pricing Practices – Final Report.* September.

² Queensland Competition Authority. 2014. *Final Report SEQ Retail Water Long-term Regulatory Framework – Pricing Principles Part C.* p.4.

2. Repayment Mechanism

2.1 Recovery of accumulated under-recovered revenue

Part B, Section 1.3(b) of the Referral Notice requires the development of measures to reduce the existing balance of the accumulated revenue under-recovery. In addressing this requirement, GAWB has also sought to address the potential pricing impacts on customers (Part B, Section 1.3(c) of the Referral Notice), particularly in the development and timing of the repayment terms.

2.1.1 Scope of repayment obligations

As noted in Part A (chapter 7), the majority of the accumulated revenue under-recovery relates to the under-recovery of the full costs of providing services to existing users. GAWB does not consider it appropriate that costs of servicing existing users (i.e. the cost of services already provided) are recovered from future users. Instead, the full amount of these costs, including the portion attributable to the augmentation of the Awoonga Dam, should be recovered from existing customers.

This approach is consistent with the QCA's Pricing Principles and National Water Initiatives Pricing Principles (NWI Pricing Principles). Furthermore, it will ensure new connections, be that of new or existing customers, are provided an appropriate pricing signal of the true cost of supply and the cost of capacity augmentations.

2.1.2 Key principles

GAWB considers that the following principles should be used to guide the recovery of accumulated revenue under-recovery from customers:

- 1. The full amount of GAWB's accumulated under-recovery as at 30 June 2020 should be recovered from existing customers.
- 2. Each customer's share of the under-recovery should be appropriate, having regard to their utilisation of GAWB's assets while the framework has been in place. The total costs to be recovered from each user needs to be determined upfront.
- 3. A fair and consistent treatment should be applied across all customers. However, there needs to be some flexibility to respond to individual circumstances.
- 4. The mechanism needs to be transparent and easy for all stakeholders to understand and administer.

The following principles are discussed in detail below.

Full recovery from existing customers

Having regard to the above, GAWB submits that in principle, it is appropriate for the full amount of the under-recovery to be recovered from existing users. This would primarily ensure that existing users remain responsible for the costs of servicing their demand, along with a (comparatively small) proportion that contributes towards the costs of the most recent Awoonga Dam augmentation, reflecting the benefits they have derived.

Recovery should reflect past levels of utilisation

GAWB notes Part B, Section 1.3(b) of the Referral Notice refers to a 'reduction' in the accumulated under-recovery amount. However, to the extent that the full balance is not recovered from existing users, these costs will need to be recovered from future users. For the reasons outlined in Part A of the Regulatory Submission (chapter 7), requiring future users to bear some of the costs of servicing existing (and past) users is neither efficient nor equitable.

Under the current regulatory framework, the level of under-recovered revenue can be clearly identified as it is a separate input to the building block formulae. This approach and the under-recovered amounts have been consistently applied across the various regulatory periods and approved/implemented by the QCA at each price reset. As such, the level of under-recovery attributable to each customer can be explicitly identified. Prior to 1 July 2020, GAWB will provide each customer with correspondence setting out the total amount of under-recovered revenue attributable to their past reservation profile. GAWB has had these values independently verified and is willing to provide the analysis to the QCA for further verification.

An alternative approach could be to apportion the current accumulated revenue under-recovery to existing customers based on forecast demand (i.e. a forward-looking methodology). GAWB does not support such an approach as it is neither fair nor equitable, for the following reasons:

- a customer who connected and started to take supply during the 2016-20 pricing period will have contributed less to the accumulated revenue under-recovery compared to a customer who has been connected and supplied since the QCA's first price review;³
- it may not adequately reflect the impact of the customer's historical consumption profile on GAWB's ARR. For example, a customer's water reservation may have been 1,000 ML p.a. in the first three regulatory pricing periods but reduced to 400 ML p.a. for the 2016-20 period;
- it places a disproportionate share of the under-recovery on customers with demand reservations that increase over the next regulatory period or represent a positive 'step change' compared to their demand in the 2016-20 period; and
- it makes the assessment of demand forecasts for the 2021-25 period more vulnerable to gaming.

³ Queensland Competition Authority. 2002. *Gladstone Area Water Board: Investigation of Pricing Practices – Final Report.* September.

The allocations that would result from GAWB's proposed approach are shown below.

Table 2.1 provides a break-down of the accumulated revenue under-recovery by customer.

Customer	Date of Connection		
	(i.e. first Regulatory Period)	(\$)	
		124,693,021	
		.2.,	

 Table 2.1:
 Accumulated revenue under recovery by customer (1 July 2020)

The above figures are representative of each customers' historic reservation, services provided by GAWB and the period of which they have taken supply.

2.1.3 Managing the impact on customers

Apart from the requirement of Part B, Section 1.3(c) of the Referral Notice, GAWB is highly aware of the need to manage the impact on its customers in recovering the accumulated under-recovery amount. The measures set out below seek to minimise the pricing impact on customers, whilst balancing the need for revenue certainty which is necessary for encouraging socially desirable investment or innovation.⁴

GAWB recognises that each of its customers face different commercial and economic circumstances. If GAWB was to immediately seek, i.e. from the 1 July 2020, to recover the full amount of the accumulated under-recovery this would have a significant impact on price. It is acknowledged that customers require predictability, and this includes having sufficient time to adapt and respond to price changes. Considering these matters, it is proposed that the repayment of the accumulated under-recovery will commence in 2022-23.

Having regard to the need for consistency and fairness, along with GAWB's exposure to demand risk over the medium to long term, all customers will be required to repay the amount of accumulated revenue under-recovery attributable to their supply point/s. GAWB is willing to negotiate repayment arrangements with each customer in good faith and in a manner that is fair to all customers and consistent with the 'repayment schedule' as set out below. Failing agreement on the repayment arrangements based on the 'default repayment terms' below. These default repayment arrangements seek to reflect the different risk profile of customers using water for industrial versus residential purposes.

Industrial Customers

A 'default repayment term' of 20 years will be applied. The default repayment term aligns with the current price smoothing period of 20 years, being the assumed period in which the accumulated under-recovery was to be fully repaid. The default repayment term will be the maximum amount of time permitted, for a customer to repay their accumulated under-recovered revenue.

A shorter term for repayment will apply to:

- customers with a water supply contract with an expiry date earlier than the default repayment term i.e. prior to 2042; or
- customers whose plant has an expected economic life shorter than the default repayment term:
 - 'expected economic life' represents the remaining period over which the plant is expected to be useable and economically viable with normal repairs and maintenance;
 - the expected economic life will be established through consultation with the customer and, if required, independent expert advice.

⁴ *Queensland Competition Authority Act 1997.* (QLD). Section 26 (1) (j). as at March 2018.

In both instances, the shorter of the default repayment term and the contractual/economic life will be the maximum amount of time permitted for the customers to repay their accumulated under-recovered revenue.

Gladstone Regional Council

A 'default repayment term' of 100 years would be applied. This longer period is in recognition of the different risk factors associated with the supply of water for residential compared to industrial purposes. It also recognises that Gladstone Regional Council (GRC) is effectively the 'customer of last resort' for recovering any residual outstanding amounts not recovered from other customers.

2.1.4 Transparent and easy to administer approach

At the start of the 2021-25 regulatory period, and each subsequent regulatory period, GAWB will write to each customer setting out the amount of accumulated revenue under-recovery attributable to their supply point/s.

The following measures will occur concurrently with each price reset. These measures will result in the 'repayment schedule':

- calculate the annual annuity payment that would extinguish the outstanding balance over the remaining term, having regard to the maximum repayment term determined above. The initial annual annuity payments will be based on the weighted average cost of capital (WACC) used to set prices commencing 1 July 2020.
- the timing for the annual payment will be set in consultation with the customer e.g. whether it is monthly or an annual payment.
- for that 5 year regulatory period, the customer's repayment schedule will comprise:
 - the five annual annuity payments (except for the 2021-25 pricing period where only 3 years will be included);
 - a balloon payment (i.e. the amount outstanding at the end of the 5 year period (30 June)). The balloon payment represents the present value (at 30 June) of the remaining accumulated revenue under-recovery attributable to their supply point/s; and the balloon payment becomes payable by 30 June in the last year of the regulatory period if the customer does not confirm its reservation for the next regulatory period. The customer must confirm its reservation at least three months before the commencement of the next regulatory period and may only adjust its reservation to the extent permitted under its contract.
- all remaining payments due in the 5 year regulatory period, including the balloon payment, become due and payable if the customer terminates their supply arrangements prior to the end of the regulatory period.
- if supply is to occur in the next regulatory period, the 'balloon payment' identified in year 5 of the repayment schedule will be used to set prices for the next regulatory period.
- based on this amount, an updated repayment schedule will be determined for the next regulatory period. That is, the annual annuity payment that would be required to extinguish the outstanding balance over the remaining term, along with a new balloon payment (being the present value (at 30 June of year 5) of the remaining payments

beyond that regulatory period) will be calculated. This calculation will have regard to the maximum repayment term determined above and the WACC for the applicable pricing period.

Assuming a default repayment term of 20 years is applied to industrial customers and a 100-year term for GRC, the initial annual annuity values are shown in Table 2.2. As noted above, this represents the maximum repayment term applicable to a customer.

Customer	Maximum Default Repayment Term	Accumulated Under Recovery Amount (2023\$M) ^a	Annual Annuity (2023-25) ^ь
	2		
			0
		136,350,384	

Table 2.2: Annual Annuity Payment (based on default repayment term)

(1) The accumulated under-recovery amount as at 1 July 2020 has been escalated using a WACC of 4.57% to determine its value in \$2023 (to align with the start of the repayment period).

(2) The annual annuity has been calculated at a constant face value, i.e. constant in nominal terms, over the annuity period using a WACC of 4.57%.