



Goulburn Valley Water Determination

1 July 2018 – 30 June 2023

19 June 2018



An appropriate citation for this paper is:

Essential Services Commission 2018, Goulburn Valley Water Determination: 1 July 2018 – 30 June 2023, 19 June

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1. General

1.1. Introduction

- (a) Clause 14 of the *WIRO* requires the commission to either:
- (i) approve the maximum prices the **regulated entity** may charge for **prescribed services** or the manner in which the **regulated entity's** prices are to be calculated, determined or otherwise regulated, as proposed by the **regulated entity** in its **price submission**; or
 - (ii) specify the maximum prices the **regulated entity** may charge for **prescribed services** or the manner in which the **regulated entity's** prices are to be calculated, determined or otherwise regulated.
- (b) On 13 June 2018, the commission made its decision under the *WIRO* in respect of:
- (i) the prices which Goulburn Valley Region Water Corporation (trading as Goulburn Valley Water) (ABN 84 578 076 056) (**Goulburn Valley Water**) may charge for **prescribed services** during the **regulatory period**; and
 - (ii) the standards and conditions of service and supply which **Goulburn Valley Water** has included in its **price submission**.
- (c) This Determination is made by the commission under section 33 of the *ESC Act*, pursuant to clauses 10 and 14 of the *WIRO*.
- (d) The purpose and reasons for the making of this Determination are to:
- (i) give effect to the decision of the commission referred to in clause 1.1(b)(i);
 - (ii) specify the maximum prices which **Goulburn Valley Water** may charge for **prescribed services** during the **regulatory period** or the manner in which such prices are to be calculated, determined or otherwise regulated;
 - (iii) facilitate the achievement of the commission's objectives in the *ESC Act* and the *WI Act*; and
 - (iv) reflect the requirements in the *WIRO*.
- (e) The reasons for the making of this Determination are as set out in the decision published by the commission on 19 June 2018.

1.2. Application

This Determination applies to **Goulburn Valley Water** and its successors and assigns in respect of the business carried on by **Goulburn Valley Water** at the date of this Determination.

1.3. Effective period

(a) **Term**

This Determination takes effect on the later of the date on which notice of its making is published in the Government Gazette or 1 July 2018, subject to clause 1.3(b), has effect until the earlier of the date on which it is amended or revoked by a later determination or 30 June 2023.

(b) **Next regulatory period**

Subject to clause 2.3(b)(ii), if the commission has not made a determination in respect of the prices to apply in the **next regulatory period** on or before 30 June 2023, the prices or the manner in which such prices are to be calculated or otherwise determined as set out in this Determination will continue to apply in respect of **prescribed services** provided by **Goulburn Valley Water** between 1 July 2023 and the date on which the determination for the **next regulatory period** comes into effect.

1.4. Modification of time periods

The commission may, by notice to **Goulburn Valley Water**, extend or reduce the time by which, or the period within which, **Goulburn Valley Water** or the commission must comply with an obligation under this Determination.

1.5. Summary and structure

Clause 2 of this Determination specifies the prices which will apply to **prescribed services** during the **regulatory period** and sets out the procedure and formula according to which prices may be adjusted during the **regulatory period** on an annual basis. Clauses 3, 4 and 5 provide for the circumstances in which prices may be adjusted during the **regulatory period** otherwise than in accordance with clause 2.

1.6. Definitions and interpretation

In this Determination, unless the contrary intention appears:

- (a) words and phrases in bold italics have the meanings given to them in part A of Schedule 1; and
- (b) the rules of interpretation in part B of Schedule 1 will apply.

1.7. Annexure

- (a) For convenience, Annexure A to this Determination summarises:
 - (i) the assumptions underpinning the prices to apply to **Goulburn Valley Water** during the **regulatory period** or the manner in which such prices are to be calculated, determined or otherwise regulated; and
 - (ii) the standards and conditions of services and supply additional to those specified in the **Code** which will be provided by **Goulburn Valley Water** pursuant to the decision referred to in clause 1.1(b)(ii).
- (b) For the avoidance of doubt, Annexure A does not form part of this Determination.

2. Price control

2.1. General principles

Subject to this Determination:

(a) Scheduled prices

Goulburn Valley Water must not charge more than:

- (i) the scheduled prices in Schedule 2, during the first **regulatory year**, and
- (ii) the amounts determined in accordance with clause 2.3, during each subsequent **regulatory year**,

in respect of those prescribed services to which the scheduled prices in Schedule 2 relate.

(b) Application principles

The application principles in Schedule 3 will apply to the prices charged by **Goulburn Valley Water** in respect of **prescribed services** during the **regulatory period**.

(c) Pricing principles

During the **regulatory period**, **Goulburn Valley Water** must apply the pricing principles in Schedule 4 when determining the prices to apply to the **prescribed services** to which the pricing principles in Schedule 4 relate.

2.2. Ancillary matters

(a) Contracts

Where **Goulburn Valley Water** has entered into a contract (a **relevant contract**) which relates to the provision of **prescribed services** prior to 1 July 2018, **Goulburn Valley Water** may charge the prices for **prescribed services** which are set out in that **relevant contract** until its expiration, termination or a periodic review of the prices set out in the contract. Once a **relevant contract** has expired or been terminated or the prices in a **relevant contract** have been subject to a periodic review, the scheduled prices in Schedule 2 (as adjusted in accordance with this Determination) or the prices determined in accordance with the pricing principles in Schedule 4 will apply for the remainder of the **regulatory period**.

(b) Dispute Resolution

Any question as to whether a price has been set in accordance with this Determination will be determined by the commission on the basis of the commission's interpretation of this Determination.

(c) Publication

Goulburn Valley Water must publish a list of its current prices and pricing principles for **prescribed services**, and all relevant supporting information that is relied upon to apply the prices or pricing principles, on its website at all times during the **regulatory period** and must provide a written copy of the list to its customers on request. The list must clearly indicate in respect of each price, the amount determined in accordance with this Determination, the amount of GST payable and the total price (in a manner consistent with the requirements of the *Competition and Consumer Act 2010* (Cth)).

(d) GST

Goulburn Valley Water will not be considered to be in contravention of this Determination if a price charged by it for a **prescribed service** exceeds the amount determined in accordance with clause 2 only by reason of the levying of a charge on account of **GST**.

2.3. Annual adjustment of prices

(a) Adjustment

(i) Subject to Schedule 2 and Schedule 5, the scheduled prices in Schedule 2 will be adjusted in each subsequent **regulatory year** in the **regulatory period** in accordance with the formula in clause 2.3(b)(i) and the procedure in clause 2.3(c), and will apply to the **prescribed services** to which the scheduled prices in Schedule 2 relate in that **regulatory year**.

(b) Formula

(i) Subject to Schedule 2 and Schedule 5, each price for the **prescribed services** referred to in clause 2.3(a) will be adjusted in accordance with the following formula with effect from the beginning of each subsequent **regulatory year** in the **regulatory period**:

$$p_t = p_{t-1} \times \frac{CPI_t}{CPI_{t-1}} \times (1 + PPM_t)$$

where:

p_t is the price component for **regulatory year** 't'

p_{t-1} is the price component for **regulatory year** 't-1'

$\frac{CPI_t}{CPI_{t-1}}$ for the particular **regulatory year** is:
the Consumer Price Index: All Groups Index for the Eight Capital Cities as published by the Australian Bureau of Statistics for the March quarter immediately preceding the start of the relevant **regulatory year**

divided by

the Consumer Price Index: All Groups Index for the Eight Capital Cities as published by the Australian Bureau of Statistics for the March quarter immediately preceding the March quarter referred to above

PPM_t is the prescribed price movement for the price component for **regulatory year** t determined in accordance with Schedule 2.

- (ii) If the commission has not made a determination in respect of the prices to apply in the **next regulatory period** on or before 30 June 2023, PPM_t will be set equal to zero for the purpose of adjusting prices in accordance with the formula in clause 2.3(b)(i) for **regulatory years** commencing on or after 1 July 2023 until the date on which this determination is amended or revoked by a later determination.

(c) Adjustment procedure

- (i) At least 30 **business days** prior to the commencement of each subsequent **regulatory year** in the **regulatory period**, **Goulburn Valley Water** must submit its proposed prices for the **prescribed services** referred to in clause 2.3(a) to apply in that subsequent **regulatory year** (the **revised scheduled prices**) to the commission for approval, together with sufficient information to enable the commission to assess whether the proposed prices comply with this Determination.
- (ii) The commission will approve the **revised scheduled prices** if it considers that they have been calculated in accordance with the formula set out in clause 2.3(b)(i).
- (iii) The commission will be deemed to have approved the **revised scheduled prices** if it has not provided notice under clause 2.3(c)(iv) to **Goulburn Valley Water** within 20 **business days** from the date of its receipt of the **revised scheduled prices**.

- (iv) If the commission does not approve the **revised scheduled prices**, the commission:
 - (A) will provide notice to **Goulburn Valley Water** (including a statement of its reasons);
 - (B) may request **Goulburn Valley Water** to provide any additional information specified by the commission;
 - (C) will take any additional information provided by **Goulburn Valley Water** into account; and
 - (D) will determine the **revised scheduled prices**.

2.4. Price changes during a billing period

(a) Application of this clause

This clause 2.4 applies where **Goulburn Valley Water** issues an invoice in respect of a billing period during which a change to any price for a **prescribed service** comes into effect in accordance with this Determination.

(b) Method of charging

Goulburn Valley Water must not charge the prices determined in accordance with this Determination in respect of any part of a billing period prior to the effective date of the change, but may charge for **prescribed services** in respect of the periods before and after the effective date of the change at the prices applicable for each of those periods on a pro-rata basis.

2.5. Reporting requirements

(a) **Goulburn Valley Water** must make available to the commission all information reasonably requested by the commission from time to time for the purpose of enabling it to confirm that **Goulburn Valley Water** is complying with this Determination.

(b) Without limiting clause 2.5(a), if, during the **regulatory period**, **Goulburn Valley Water** enters into a **new contract** which relates to the provision of a **prescribed service** to which the pricing principles in Schedule 4 relate, **Goulburn Valley Water** must, within 30 **business days** of the date of the **new contract**, on request provide the commission with a notice specifying:

- (i) details of the **new contract**; and
- (ii) information which demonstrates the way in which the prices in the **new contract** reflect the relevant pricing principles.

- (c) Without limiting clause 2.5(a), if **Goulburn Valley Water** proposes to stop providing a **prescribed service** or refuses to provide a **prescribed service** to a customer, or potential customer, during the **regulatory period**, it must:
- (i) in the case of a proposal to stop providing a **prescribed service**, provide a notice to the commission stating the nature of the **prescribed service** which it proposes to stop providing and the reason why it proposes to stop providing the **prescribed service**. This notice must be provided at least 30 **business days** prior to the date upon which **Goulburn Valley Water** proposes to stop providing the **prescribed service**; and
 - (ii) in the case of a refusal to provide a **prescribed service** to a customer, or potential customer, **Goulburn Valley Water** must provide a notice to the commission within 5 **business days** of the refusal, stating the nature of the **prescribed service** and the reason for the refusal.

3. Amendment of Schedule 2

(a) Amendment

- (i) **Goulburn Valley Water** may apply to the commission in accordance with this clause 3 and Schedule 5 for the amendment of the prescribed price movements and/or price components included in Schedule 2 for the following **regulatory year** (the **relevant regulatory year**) and all subsequent **regulatory years** remaining in the **regulatory period** (the **revised tariff schedule**).
- (ii) The average price movement for the **relevant regulatory year** and for each subsequent **regulatory year** in the **regulatory period** determined in accordance with the **revised tariff schedule** must not exceed the weighted average price movement that would otherwise have applied under this Determination as calculated in accordance with the following formula.

$$\frac{\sum_{i=1}^n \sum_{j=1}^m p_t^{ij} q_{t-2}^{ij}}{\sum_{i=1}^n \sum_{j=1}^m p_{t-1}^{ij} q_{t-2}^{ij}} \geq \frac{\sum_{i=1}^n \sum_{j=1}^m ap_t^{ij} q_{t-2}^{ij}}{\sum_{i=1}^n \sum_{j=1}^m p_{t-1}^{ij} q_{t-2}^{ij}}, i = 1, \dots, n; j = 1 \dots m$$

where **Goulburn Valley Water** has n tariff categories, which each have up to m tariff components, and where, for each **regulatory year** t for which the calculation is undertaken:

p_{t-1}^{ij} is the tariff charged in **regulatory year** $t-1$ for component j of tariff i

p_t^{ij} is the proposed tariff for component j of tariff i determined in accordance with Schedule 2 where the **revised tariff schedule** is not applied

ap_t^{ij} is the proposed tariff for component j of tariff i determined in accordance with Schedule 2 where the **revised tariff schedule** is applied

q_{t-2}^{ij} is the quantity of component j of tariff i that was sold in **regulatory year** $t-2$, or, if an actual quantity is not available, either an estimate of the quantity of component j of tariff i that would have been sold in **regulatory year** $t-2$ or a forecast of the quantity of component j of tariff i that is expected to be sold in **regulatory year** $t-2$

(b) Amendment procedure

- (i) An application by **Goulburn Valley Water** under this clause 3 must be received by the commission at least 80 **business days** prior to the commencement of the **relevant regulatory year** and must be accompanied by the following information:
- (A) (1) a clearly articulated new tariff strategy that is consistent with clause 11 of the **WIRO** (the **revised tariff strategy**); or
 - (2) an explanation of how the **revised tariff schedule** is consistent with the tariff strategy for **Goulburn Valley Water** approved by the commission in connection with this Determination, (the **relevant tariff strategy**);
 - (B) a **revised tariff schedule** that specifies proposed prices for the **relevant regulatory year** and prescribed price movements for each subsequent **regulatory year** in the **regulatory period** that is consistent with the **relevant tariff strategy**;
 - (C) a statement setting out evidence demonstrating that **Goulburn Valley Water** has provided information to its customers explaining the **revised tariff schedule** and how it relates to the **relevant tariff strategy** and has consulted effectively with its customers on the **revised tariff strategy** (if clause 3(b)(i)(A)(1) applies) and the **revised tariff schedule**;
 - (D) a statement setting out the customer impacts resulting from the **revised tariff schedule** and actions proposed by **Goulburn Valley Water** to address these customer impacts; and
 - (E) an explanation of the calculation of the relevant quantities " q_{t-2}^{ij} ".
- (ii) The commission may approve the **revised tariff schedule** submitted by **Goulburn Valley Water** under this clause 3 if it is satisfied that:
- (A) **Goulburn Valley Water** has complied with clause 3(b)(i)(A);
 - (B) the price movements calculated in accordance with the **revised tariff schedule** comply with clause 3(a)(ii);
 - (C) the **revised tariff schedule** is consistent with the **relevant tariff strategy**;
 - (D) **Goulburn Valley Water** has consulted effectively with its customers on the **revised tariff strategy** (if clause 3(b)(i)(A)(1) applies) and the **revised tariff schedule**;
 - (E) **Goulburn Valley Water** has effectively addressed customer impacts resulting from the **revised tariff schedule**; and
 - (F) the basis for calculating the relevant quantities " q_{t-2}^{ij} " is reasonable.

- (iii) In determining whether it will approve the **revised tariff schedule**, the commission may request **Goulburn Valley Water** to provide any additional information specified by the commission and/or to resubmit any of the matters in clause 3(b)(i)(A)-(E).
- (iv) The commission will be deemed to have not approved a **revised tariff schedule** if it has not provided notice to **Goulburn Valley Water** within 40 **business days** from the date of its receipt of **Goulburn Valley Water's** application under this clause 3.
- (v) An approved **revised tariff schedule** will be taken to amend Schedule 2 to the extent of any inconsistency.

4. Uncertain or unforeseen events

4.1. General principle

- (a) **Goulburn Valley Water** may apply to the commission for the amendment of this Determination and/or the adjustment of the scheduled prices in Schedule 2 to reflect increased or decreased costs incurred by **Goulburn Valley Water** and/or increased or decreased revenue received by **Goulburn Valley Water** as a result of events which were uncertain or unforeseen at the time this Determination was made (an **uncertain events application**).
- (b) Whether or not **Goulburn Valley Water** makes an application under clause 4.1(a), **Goulburn Valley Water** must promptly notify the commission upon becoming aware of an event which could form part or all of the basis of an application.
- (c) The commission may take action under clause 4.3(b) in respect of an **uncertain events application** where the commission is satisfied that such action is necessary or desirable to take account of events that were uncertain or unforeseen at the time of making this Determination provided that the commission is satisfied that such action takes into account the interests of customers. Generally the matters taken into account will include positive and negative influences on revenue and expenditure. The Commission may limit an adjustment to only some events or a single event.

4.2. Consideration by the commission

(a) Examples of uncertain and unforeseen events

The matters that may, at the discretion of the commission, be taken into account by the commission under this clause 4 include:

- (i) actual licence fees or contributions payable by **Goulburn Valley Water** during a particular **regulatory year** during the **regulatory period** under section 51 of the *Safe Drinking Water Act 2003* (Vic), section 24 of the *Environment Protection Act 1970* (Vic) and section 4H(2) of the **WI Act** which differ from the forecast licence fees or contributions set out in Annexure A for that **regulatory year**;
- (ii) changes in the timing or scope of expenditure by **Goulburn Valley Water** on major capital projects;
- (iii) instances where the commission is satisfied that there is a material difference between the forecast demand levels set out in Annexure A and

actual demand levels for **Goulburn Valley Water** in one or more **regulatory years** during the **regulatory period**;

- (iv) amounts payable by **Goulburn Valley Water** for purchases of bulk water during a particular regulatory year during the regulatory period which differ from the forecast bulk water payments set out in Annexure A for that regulatory year; and
- (v) a change in or to any of the following:
 - (A) the **WI Act**, the *Water Act 1989* (Vic), the *Safe Drinking Water Act 2003* (Vic), the *State Owned Enterprises Act 1992* (Vic) and the *Environment Protection Act 1970* (Vic);
 - (B) any licence issued pursuant to any of the Acts referred to in clause 4.2(a)(iv)(A);
 - (C) a **relevant tax**; or
 - (D) the Statement of Obligations; or
 - (E) the introduction or cessation of a statutory carbon price or tax or a national emissions trading scheme or other scheme relating to the reduction of greenhouse gas emissions.

(b) Exclusions

In considering an **uncertain events application**, the commission will not take into account matters that:

- (i) are or should be within **Goulburn Valley Water's** control;
- (ii) were or should have been known by **Goulburn Valley Water** at the time the Determination was made;
- (iii) could reasonably have been foreseen by **Goulburn Valley Water**;
- (iv) should be or should have been planned for or managed by **Goulburn Valley Water**, and/or
- (v) reflect inefficient expenditure by **Goulburn Valley Water**.

(c) Dispute resolution

Any question as to whether a matter should be taken into account by the commission under this clause 4 will be determined by the commission in its absolute discretion.

4.3. Procedure

(a) Application process

- (i) An ***uncertain events application*** must be accompanied by a statement setting out:
 - (A) the details of each relevant uncertain or unforeseen event;
 - (B) the amount and timing of any increase or decrease in operating and/or capital expenditure associated with the relevant event during the ***regulatory period*** and/or the amount and timing of any increase or decrease in revenue associated with the relevant event during the ***regulatory period***;
 - (C) the basis for calculating the increase or decrease in operating and/or capital expenditure and/or revenue referred to in clause 4.3(a)(i)(B); and
 - (D) details of the proposed action to be taken by the commission under clause 4.3(b).
- (ii) The commission may identify an event or events which it considers has had or may have a material impact on ***Goulburn Valley Water's*** operating and/or capital expenditure and/or revenue and may decide to take action under clause 4.3(b) in the absence of an ***uncertain events application*** by ***Goulburn Valley Water***.
- (iii) The commission may request ***Goulburn Valley Water*** to provide any additional information specified by the commission in connection with an ***uncertain events application***.

(b) Action by the commission

If the commission is satisfied of the matters set out in clause 4.1(c) in respect of an ***uncertain events application*** or an event identified by the commission under clause 4.3(a)(ii), the commission may, in its absolute discretion:

- (i) amend this Determination or adjust the scheduled prices in Schedule 2 and/or the revenue requirements in Annexure A with effect from a date and in a manner decided by the commission (in respect of one or more events) at a time decided by the commission; or
- (ii) take the ***uncertain events application*** into account in making its determination in respect of the prices which ***Goulburn Valley Water*** may charge for ***prescribed services*** in the ***next regulatory period***.

5. Material error and unintended consequences

Where the commission is satisfied that in any material respect:

- (a) this Determination or any information relied upon in the making of this Determination contains an error, deficiency or miscalculation;
- (b) any information on which this Determination was based was false or misleading in a material respect; or
- (c) such amendment or adjustment is necessary or desirable to avoid an unintended consequence of this Determination,

the commission may decide to amend this Determination and/or specify a price adjustment, provided that it is satisfied that such amendment and/or price adjustment takes into account the interests of customers.

In most cases, any amendment will be undertaken in accordance with the commission's standard consultation process for price determinations, including the issue of a draft decision and an invitation for interested parties to make submissions to the commission in relation to the draft decision, as set out in clause 16(a) and (b) of the WIRO.

In some limited circumstances, the commission may amend this Determination without further consultation, or with only limited consultation. This will be the case where an amendment is not sufficiently material to warrant a full consultation process, or where there is urgency that justifies the commission moving quickly, as set out in clause 16(c) of the WIRO. In these circumstances, the commission will provide its reasons for proceeding with the amendment without consultation (or with a modified consultation process).

Schedule 1 – Definitions and interpretation

A Definitions

business day means a day on which banks are open for general banking business in Melbourne, not being a Saturday or a Sunday.

Code means the applicable *Customer Service Code* made under the **WI Act**.

ESC Act means the *Essential Services Commission Act 2001* (Vic).

GST has the meaning given in section 195-1 of the *A New Tax System (Goods and Services) Tax Act 1999* (Cth).

miscellaneous services means services that are provided in direct connection with **prescribed services**, prices in respect of which are either included in Schedule 2 or determined in accordance with the relevant pricing principles in Schedule 4.

new contract means any contract for **prescribed services** which is renewed, renegotiated or entered into during the **regulatory period**.

next regulatory period means the period commencing on 1 July 2023 and ending on a date specified by the commission.

prescribed services has the meaning given in the **WIRO** and includes **miscellaneous services**.

price submission has the meaning given in the **WIRO**.

regulated entity has the meaning given in the **WIRO**.

regulatory period means the period commencing on 1 July 2018 and ending on 30 June 2023.

regulatory year means each period of twelve months commencing on 1 July and ending on 30 June.

relevant contract means a contract which relates to the provision of **prescribed services**.

relevant tax means any tax imposed by or payable directly or indirectly to any government or public authority in the Commonwealth of Australia (including **GST**) but excluding:

- (a) the licence fees referred to in clause 4.2 of this Determination;
- (b) penalties and interest for late payment of any tax; or
- (c) any tax that replaces any of the taxes referred to in (a) and (b), where tax includes any rate, duty, charge or other like or analogous impost.

WI Act means the *Water Industry Act 1994* (Vic).

WIRO means the Water Industry Regulatory Order 2014 as at the date of this Determination.

B Interpretation

Headings are for convenience only and do not affect interpretation. The following rules apply unless the context requires otherwise.

- (a) The singular includes the plural, and the converse also applies.
- (b) If a word or phrase is defined, its other grammatical forms have a corresponding meaning.
- (c) A reference to a person includes a corporation, trust, partnership, unincorporated body or other entity, whether or not it comprises a separate legal entity.
- (d) A reference to a clause or schedule is a reference to a clause of or schedule to this document.
- (e) A reference to a determination, agreement or document (including a reference to this document) is to the agreement or document as amended, supplemented, novated or replaced, except to the extent prohibited by this document or that other agreement or document.
- (f) A reference to an Act, ordinance, code or other law includes regulations and other instruments under it and consolidations, amendments, re-enactments or replacements of any of them.
- (g) If a period of time is specified and commences on a given day or on a day of an act or event, the period of time is to be calculated inclusive of that day.
- (h) Any “notice” to be given or matter to be “notified” must be in writing.
- (i) The symbol ‘ Σ ’ requires a summation to be performed over the range of variables specified in respect of the algebraic terms specified.
- (j) All data which is utilised in calculations made under this Determination will be utilised to the accuracy, in terms of the number of decimal places, to which it is given.
- (k) A fixed price, charge or fee determined in accordance with this Determination is to be rounded down and specified to two decimal places.
- (l) A volumetric price, charge or fee determined in accordance with this Determination is to be rounded down and specified to four decimal places.
- (m) When a calculation is required under this document:
 - (i) **regulatory year** ‘t’ is the **regulatory year** in respect of which the calculation is being made;
 - (ii) **regulatory year** ‘t-1’ is the **regulatory year** immediately preceding **regulatory year** ‘t’;
 - (iii) **regulatory year** ‘t-2’ is the **regulatory year** immediately preceding **regulatory year** ‘t-1’.

Schedule 2 – Prices

This schedule should be read in conjunction with Schedule 3, Schedule 4 and Schedule 5. Variable water, wastewater, and trade waste charges are rounded down to 4 decimal places. All other charges are rounded down to 2 decimal places.

Tariff and Price Component	Price (1 July 2018)	PPM Year 2	PPM Year 3	PPM Year 4	PPM Year 5
1.1 Water Tariff – Service Charge (per annum)					
Meter size					
20mm	170.63	-2.0%	-2.0%	-2.0%	-2.0%
25mm	266.61	-2.0%	-2.0%	-2.0%	-2.0%
32mm	436.82	-2.0%	-2.0%	-2.0%	-2.0%
40mm	682.53	-2.0%	-2.0%	-2.0%	-2.0%
50mm	1066.47	-2.0%	-2.0%	-2.0%	-2.0%
80mm	2730.15	-2.0%	-2.0%	-2.0%	-2.0%
100mm	4265.87	-2.0%	-2.0%	-2.0%	-2.0%
150mm	9598.21	-2.0%	-2.0%	-2.0%	-2.0%
200mm	17063.49	-2.0%	-2.0%	-2.0%	-2.0%
250mm	26661.71	-2.0%	-2.0%	-2.0%	-2.0%
300mm	38395.69	-2.0%	-2.0%	-2.0%	-2.0%
Vacant Lots	85.32	-2.0%	-2.0%	-2.0%	-2.0%
1.2 Water Tariff – Usage Charge (per kL)					
Potable	1.1744	-2.0%	-2.0%	-2.0%	-2.0%
Non-Potable	0.8221	-2.0%	-2.0%	-2.0%	-2.0%
Raw Water – for Districts with Raw Water services	0.5870	-2.0%	-2.0%	-2.0%	-2.0%
1.3 Sewerage Tariff – Service Charge (per annum)					
Residential	443.15	-2.0%	-2.0%	-2.0%	-2.0%
Vacant Land	221.55	-2.0%	-2.0%	-2.0%	-2.0%
Non-Residential	443.15	-2.0%	-2.0%	-2.0%	-2.0%
Cistern (per cistern for major customers)	443.15	-2.0%	-2.0%	-2.0%	-2.0%
1.4 Sewerage Tariff – Volumetric Charge for non-residential customers (per kL)					
Usage charge	1.6009	-2.0%	-2.0%	-2.0%	-2.0%

Tariff and Price Component	Price (1 July 2018)	PPM Year 2	PPM Year 3	PPM Year 4	PPM Year 5
1.5 Trade Waste Charges					
Trade Waste Application Fee	96.06	-2.0%	-2.0%	-2.0%	-2.0%
Sample Test Fees	At Cost				
Category 1 & 2 Service Charge – all districts (per annum)	229.11	-2.0%	-2.0%	-2.0%	-2.0%
Shepparton – Category 3					
Flow – per Kl	0.6604	-2.0%	-2.0%	-2.0%	-2.0%
BOD – per kg	0.4078	-2.0%	-2.0%	-2.0%	-2.0%
Sodium – per kg	0.9252	-2.0%	-2.0%	-2.0%	-2.0%
Nitrogen – per kg	0.7932	-2.0%	-2.0%	-2.0%	-2.0%
Phosphorus – per kg	2.1158	-2.0%	-2.0%	-2.0%	-2.0%
Shepparton — Category 4					
Flow – per Kl	0.5571	-2.0%	-2.0%	-2.0%	-2.0%
BOD – per kg	0.2778	-2.0%	-2.0%	-2.0%	-2.0%
Sodium – per kg	0.7031	-2.0%	-2.0%	-2.0%	-2.0%
Nitrogen – per kg	0.9816	-2.0%	-2.0%	-2.0%	-2.0%
Phosphorus – per kg	2.2302	-2.0%	-2.0%	-2.0%	-2.0%
Mooroopna — Category 4					
Flow – per Kl	0.5571	-2.0%	-2.0%	-2.0%	-2.0%
BOD – per kg	0.2778	-2.0%	-2.0%	-2.0%	-2.0%
Sodium – per kg	0.7031	-2.0%	-2.0%	-2.0%	-2.0%
Nitrogen – per kg	0.9816	-2.0%	-2.0%	-2.0%	-2.0%
Phosphorus – per kg	2.2302	-2.0%	-2.0%	-2.0%	-2.0%
Tatura — Category 3					
Flow – per Kl	0.8413	-2.0%	-2.0%	-2.0%	-2.0%
BOD – per kg	0.5284	-2.0%	-2.0%	-2.0%	-2.0%
Sodium – per kg	1.1776	-2.0%	-2.0%	-2.0%	-2.0%
Nitrogen – per kg	0.9370	-2.0%	-2.0%	-2.0%	-2.0%
Phosphorus – per kg	2.1158	-2.0%	-2.0%	-2.0%	-2.0%
Tatura — Category 4					
Flow – per Kl	0.9021	-2.0%	-2.0%	-2.0%	-2.0%
BOD – per kg	0.1982	-2.0%	-2.0%	-2.0%	-2.0%
Sodium – per kg	1.2472	-2.0%	-2.0%	-2.0%	-2.0%
Nitrogen – per kg	0.9816	-2.0%	-2.0%	-2.0%	-2.0%
Phosphorus – per kg	2.2302	-2.0%	-2.0%	-2.0%	-2.0%
All Other Districts — Category 3					
Flow – per Kl	0.7932	-2.0%	-2.0%	-2.0%	-2.0%
BOD – per kg	0.5284	-2.0%	-2.0%	-2.0%	-2.0%
Sodium – per kg	0.9370	-2.0%	-2.0%	-2.0%	-2.0%
Nitrogen – per kg	0.7932	-2.0%	-2.0%	-2.0%	-2.0%

Tariff and Price Component	Price (1 July 2018)	PPM Year 2	PPM Year 3	PPM Year 4	PPM Year 5
Phosphorus – per kg	2.1158	-2.0%	-2.0%	-2.0%	-2.0%
1.6 Developer Charges - New Customer Contributions (per lot)					
Water (per lot)	2627.28	0.0%	0.0%	0.0%	0.0%
Sewer (per lot)		0.0%	0.0%	0.0%	0.0%
1.7 Miscellaneous Fees and Charges					
Water sales via standpipes – per KL.	2.56	0.0%	0.0%	0.0%	0.0%
Information Statements – per item	50.95	0.0%	0.0%	0.0%	0.0%
Special meter read fee – per read	50.00	0.0%	0.0%	0.0%	0.0%
Meter Fee – per 20mm meter	166.78	0.0%	0.0%	0.0%	0.0%
Sewer connection fee – per connection	156.63	0.0%	0.0%	0.0%	0.0%
Septic tank waste receival fee (per litre)	0.0427	0.0%	0.0%	0.0%	0.0%
Grease trap waste receival fee (per litre)	0.1700	0.0%	0.0%	0.0%	0.0%
1.8 Non-Core Miscellaneous Fees and Charges					
Access to personal information	27.59	0.0%	0.0%	0.0%	0.0%
Meter Accuracy Test – per test	196.08	0.0%	0.0%	0.0%	0.0%
Fire Service Tests – per test	196.08	0.0%	0.0%	0.0%	0.0%
Water Quality test – per test	167.68	0.0%	0.0%	0.0%	0.0%
Replacement of galvanised iron property service pipe*	At Cost				
Maximum charge*	563.53	0.0%	0.0%	0.0%	0.0%
Emergency Standpipe Charge	At Cost				
Water Tapping Fee:					
20mm service – per tapping	58.58	0.0%	0.0%	0.0%	0.0%
25mm service – per tapping	68.50	0.0%	0.0%	0.0%	0.0%
32mm service – per tapping	78.19	0.0%	0.0%	0.0%	0.0%
40mm service – per tapping	88.00	0.0%	0.0%	0.0%	0.0%
50mm service – per tapping	97.91	0.0%	0.0%	0.0%	0.0%
80mm, 100mm, 150mm, 225mm services – per tapping	490.83	0.0%	0.0%	0.0%	0.0%
Water consent to connect:					
20mm service – per connection	97.91	0.0%	0.0%	0.0%	0.0%
25mm, 32mm, 40mm, or 50mm service – per connection	147.18	0.0%	0.0%	0.0%	0.0%
80mm, 100mm, 150mm or 225mm service – per connection	294.49	0.0%	0.0%	0.0%	0.0%

Tariff and Price Component	Price (1 July 2018)	PPM Year 2	PPM Year 3	PPM Year 4	PPM Year 5
Water shutdown fee to enable connection (if required)	186.55	0.0%	0.0%	0.0%	0.0%
Fire Service Charges:					
20mm service – per annum	17.06	-2.0%	-2.0%	-2.0%	-2.0%
25mm service – per annum	26.66	-2.0%	-2.0%	-2.0%	-2.0%
32mm service – per annum	43.68	-2.0%	-2.0%	-2.0%	-2.0%
40mm service – per annum	68.25	-2.0%	-2.0%	-2.0%	-2.0%
50mm service – per annum	106.64	-2.0%	-2.0%	-2.0%	-2.0%
80mm service – per annum	273.01	-2.0%	-2.0%	-2.0%	-2.0%
100mm service – per annum	426.58	-2.0%	-2.0%	-2.0%	-2.0%
150mm service – per annum	959.82	-2.0%	-2.0%	-2.0%	-2.0%
200mm service – per annum	1706.34	-2.0%	-2.0%	-2.0%	-2.0%
Water Meter Fee – new connection or damaged meter – per meter:					
25mm service	294.49	0.0%	0.0%	0.0%	0.0%
32mm service	589.12	0.0%	0.0%	0.0%	0.0%
40mm service	834.72	0.0%	0.0%	0.0%	0.0%
50mm service	1,964.22	0.0%	0.0%	0.0%	0.0%
80mm service	2,553.46	0.0%	0.0%	0.0%	0.0%
100mm service	3,290.03	0.0%	0.0%	0.0%	0.0%
150mm service	3,535.76	0.0%	0.0%	0.0%	0.0%
225mm service	5,646.87	0.0%	0.0%	0.0%	0.0%
Meter box to protect meter if required (per meter box)	62.77	0.0%	0.0%	0.0%	0.0%
Sewer Connection Fees – per connection:					
Residential connection other than standard (e.g. unit development)	205.77	0.0%	0.0%	0.0%	0.0%
Small commercial/industrial connection	205.77	0.0%	0.0%	0.0%	0.0%
Alterations to existing connections	127.34	0.0%	0.0%	0.0%	0.0%
Sewer plan and build-over fee (application fee for building over Authority works) – per plan	182.00	0.0%	0.0%	0.0%	0.0%
Cut in sewer point/manhole fee – per cut in	490.83	0.0%	0.0%	0.0%	0.0%
Water backflow prevention application fee – per application	137.14	0.0%	0.0%	0.0%	0.0%
Water backflow prevention annual test fee – per annum	58.35	0.0%	0.0%	0.0%	0.0%
Recoverable works and fire plug maintenance *	At cost				
Legal cost recovery – debt recovery charges and	At cost				

Tariff and Price Component	Price (1 July 2018)	PPM Year 2	PPM Year 3	PPM Year 4	PPM Year 5
legal costs incurred *					
Water reconnection fee (following disconnection as part of debt collection procedures) – per reconnection	34.23	0.0%	0.0%	0.0%	0.0%
Water reconnection fee After Hours in addition to the Water reconnection fee (following disconnection as part of debt collection procedures) – per reconnection	95.78	0.0%	0.0%	0.0%	0.0%
Damage to restrictor cap and/or lock (following restriction as part of the debt collection procedures) – per damaged item	At cost				
Dishonour cheque fee*	Bank charge				
Dishonour electronic fund transfer fee*	Bank charge				
EasyWay Payment Card (to assist customers with periodic payments) – per card	6.74	0.0%	0.0%	0.0%	0.0%
Freedom of Information – provision of documents via Freedom of Information request	27.59	0.0%	0.0%	0.0%	0.0%

1.9 Developer and Landowner

Works Fees and Charges

District Extension Fee					
Application fee	1052.15	0.0%	0.0%	0.0%	0.0%
Further costs to extend districts*	At Cost				
Landowner or Developer works charges*					
Feasibility report fee*	150.00	0.0%	0.0%	0.0%	0.0%
Design, supervision, review and administration charge*	At Cost				

* GST applies to these fees and charges

As set out in clause 1.1(d) of this Determination, the role of the commission in making this Determination is limited to specifying the maximum prices that **Goulburn Valley Water** may charge for **prescribed services** during the **regulatory period**, or the manner in which such prices are to be calculated, determined or otherwise regulated.

It is the role of **Goulburn Valley Water** to apply a tariff in accordance with the **Water Act 1989 (Vic)**. The commission does not have a role in hearing disputes about individual billing issues that users may have.

Schedule 3 – Application of prices

3.1 Volumetric sewerage charges

The volume of water attracting the volumetric sewerage charge is based on water measured through the water meter and allowance for a discharge factor as per the following table. There is no charge for the first 180kL of calculated discharge. Should a customer disagree with the discharge factor applied to a property this will be reviewed by **Goulburn Valley Water** and particular circumstances considered in order to agree on an appropriate discharge factor for the property. In circumstances where a volumetric charge cannot be appropriately calculated, a charge on a 'per cistern' basis will be applied.

Discharge factor (per cent)	Activity
0	Farm Land (stock trough), Fire Service, Median Strip, Pumping Station, Quarry, Tip, Vacant Land, Water Reserve, Water Storage, Water Treatment Plant
10	Concreting Plant
25	Bowling Club, Car Park, Cemetery, Croquet Club, Golf Course, Ovals, Plant Nursery/Garden Supplies, Public Gardens/Parks, Race Course, Recreation Reserve, Reserve - Other, Tennis Courts, Tennis Courts (lawn)
40	Retirement Village
50	Ambulance Service, Caravan Park/Camping Ground, Foundry, Pre-school/Kindergarten, School, School - Secondary, Swimming Pool
75	Rest Area (Vic Roads)
80	Trotting Track, Animal Pound, Bed and Breakfast, Boarding House/Guest House, Church, Church Hall, Community Centre, Child Minding Centre, Car Yard, Disability Centre, Fire Station, Hall, Hostel, Hotel/Motel, Infant Welfare Centre, Motel, Nursing Home, Stables, School-Primary, Shed
95	Abattoir, Aerodrome, Art Gallery, Bank, Boat Shed/Storage, Building(s), Business Premises, Cafe/Take-a-Way/Coffee Shop, Cattle Yards/ Saleyards, Club/Clubrooms, Dairy, Dentist Surgery, Depot, Doctors Surgery/Rooms, Drive-in Theatre, Factory, Funeral Parlour, Garage-Auto Repairs, Gymnasium, Hairdresser/Barber, Health Centre, Hospital, Hotel, Laboratory, Laundry, Library, Mill - other, Motor & Engineering Works, Motor Race Track, Museum, Museum/Historical Buildings/Tourist Att., Office, Paper Mill, Police Station, Post Office, Railway Station, Recreation Camp, Restaurant, Rooms - Consulting, Rooms - Professional, Service Station, Shire Offices, Shop, Shop & Dwelling, Show Room, Sporting Complex, Squash Courts, Store/Warehouse, Sub-station (elect.), Supermarket, Telephone Exchange, Television Station, Theatre, Timber Yard/Mill, Toilet Block, Tourist/Reception Complex, Veterinary Clinic, Weighbridge, Workshop, Wrecking Yard.

3.2 Trade waste categorisation

Trade Waste Customers are assigned to various trade waste categories in accordance with flow and load specifications contained in Schedule 2 of By-Law No. 507 Trade Waste. Flow and load data is obtained from customers' trade waste application forms and sampling results. Sewerage service charges and volumetric charges apply in conjunction with trade waste charges.

3.3 Miscellaneous fees and charges

The following table sets out the definitions of the miscellaneous charges contained in Schedule 2.

Miscellaneous service	Definition
Water sales via standpipes (per kL)	This service provides water to Water Cartage contractors via standpipes. Water is then delivered by the Cartage Contractor to Rural properties and other users including road making.
Information statement (per item)	The provision of property information to solicitors and others to assist with property conveyancing.
Meter fee - 20mm meter (per read)	The supply of a meter for the connection of a new property or to replace a damaged meter.
Sewer connection fee (per connection)	Application fee to connect a new property to sewer reticulation.
Special meter read fee (per read)	Meter read requested by property owner to facilitate property conveyancing or tenancy changes.
Septic tank waste receival fee (per litre)	Fee to receive, treat & dispose of septic tank waste received from contractors.
Grease trap waste receival Fee (per litre)	Fee to receive, treat and dispose of grease trap waste received from contractors.
Connection fee	Applicable fee to connect a property to the water reticulation network.

Schedule 4 – Pricing principles

4.1 Recycled water pricing principles

Recycled water prices should be set so as to:

- have regard to the price of any substitutes and customers' willingness to pay;
- cover the full cost of providing the service (with the exception of services related to specified obligations or maintaining balance of supply and demand); and
- include a variable component.

Where **Goulburn Valley Water** does not propose to fully recover the costs associated with recycled water, it must demonstrate to the commission that:

- it has assessed the costs and benefits of pursuing the recycled water project;
- it has clearly identified the basis on which any revenue shortfall is to be recovered; and
- if the revenue shortfall is to be recovered from non-recycled water customers, either the project is required under the Statement of Obligations which applies to **Goulburn Valley Water** or pursuant to other government policies that apply to **Goulburn Valley Water** or there has been consultation with the affected customers about their willingness to pay for the benefits of increased recycling.

4.2 Pricing principles where scheduled prices do not apply

Where the prices set out in Schedule 2 do not apply because the nature of the service provided to a particular customer (including, in the case of trade waste customers, the volume or load of waste treated) is unique, prices must be set as follows:

- variable prices (including, in the case of trade waste customers, load-based charges) should reflect the long run marginal cost of providing services (including, in the case of trade waste customers, trade waste transfer, treatment and disposal);
- the total revenue received from each customer should be greater than the cost that would be avoided from ceasing to serve that customer, and (subject to meeting avoidable cost) less than the stand alone cost of providing the service to the customer in the most efficient manner;
- the methodology used to allocate common and fixed costs to that customer should be clearly articulated and be consistent with any guidance provided by the commission;
- prices should reflect reasonable assumptions regarding the customer's demand for services (including, in the case of trade waste customers, the volume and strength of trade waste anticipated to be produced by that customer);

- depreciation rates and rates of return used to determine prices should be consistent with those adopted by the commission for the purposes of making this Determination;
- customers should be provided with full details of the manner in which prices have been calculated and any new, renewed or renegotiated contractual agreements with customers should indicate that the prices to apply are subject to any Determination made by the commission;
- where applying these principles results in significant changes to prices or tariff structures, arrangements for phasing in the changes may be considered and any transitional arrangements should be clearly articulated.

4.3 Pricing principles for New Customer Contributions (NCC)

Core pricing principles

NCC, including standard or negotiated NCC, will be calculated by applying the following core NCC pricing principles.

Standard and negotiated NCC will:

- have regard to the incremental infrastructure and associated costs in one or more of the statutory cost categories attributable to a given connection;
- have regard to the incremental future revenues that will be earned from customers at that connection;
- be greater than the avoidable cost of that connection and less than the standalone cost of that connection.

Notes:

1. Given that NCC are to be based on the net incremental cost of connection (ie incremental costs net of incremental benefits), in this context, the costs referred to in the efficient pricing bound are the net costs, specifically the avoidable net cost of connection and standalone net cost of connection.
2. Where the connection arrangement requires assets to be gifted, the value of gifted assets will be excluded for the purpose of calculating net costs.
3. Incremental costs may include financing costs associated with constructing an asset sooner than planned.

Incremental financing costs

Incremental financing costs (IFC) should be calculated using this formula:

$$IFC = \left(1 - \left[\frac{1}{(1+r)^n}\right]\right) \times \text{cost of capital being provided sooner than planned}$$

where:

- r estimated pre-tax regulatory rate of return
- n the number of years the asset is required sooner than planned.

Gifted Assets

Goulburn Valley Water can require developers to provide and gift to **Goulburn Valley Water** specified assets as a condition of connection, provided that **Goulburn Valley Water**:

- makes clear to potential developers which assets a developer will be responsible for providing and gifting, and which will be provided by **Goulburn Valley Water**;
- confirms that negotiation of any non-standard connection and associated charges will be undertaken in accordance with **Goulburn Valley Water's** published negotiating framework; and
- the value of gifted assets will be excluded for the purposes of calculating net costs.

4.4 Pricing principles for miscellaneous services not included in Schedule 2

Prices for miscellaneous services must be set according to actual cost calculated on the basis of the aggregate of:

- direct third party or contractor invoice cost;
- direct marginal internal costs, including labour, materials and transport costs; and
- a fair contribution to overheads.

For bank dishonour, debt collection and legal fees, the third party costs must be charged directly to the customer with no contribution for internal costs or a contribution to overheads.

4.5 Guidelines

Goulburn Valley Water must comply with any guidelines issued by the commission from time to time which relate to the setting of prices for **prescribed services** to which Schedule 4 relates.

Schedule 5 – Adjustment for costs associated with annual updates to the trailing average cost of debt

If in any **regulatory year** Condition A applies, the formula set out in clause 2.3(b) is not applicable to the extent it relates to the prices outlined in Schedule 5A. These prices are set out in items 1.1 to 1.5 of Schedule 2.

Instead the prices above will be adjusted in accordance with the formulas (as applicable) provided below, with effect from the beginning of each subsequent **regulatory year** in the **regulatory period**.

Goulburn Valley Water must comply with any guidance issued by the commission from time to time which relate to the setting of prices for **prescribed services** to which Schedule 2 and 4 relates.

Schedule 5A – Adjustments to prices

	Condition A (Annual cost of debt update)
1.1 Water Tariff – Service Charge (per annum)	X
1.2 Water Tariff – Usage Charge (per KL)	X
1.3 Sewerage Tariff – Service Charge (per annum)	X
1.4 Sewerage Tariff – Volumetric Charge for non-residential customers (per KL)	X
1.5 Trade Waste Charges	X

Schedule 5B – Prices

Condition A – Annual cost of debt update

Condition A will apply when the trailing average cost of debt in any **regulatory year** 't' changes in that year. The adjustment is calculated as per formula 4.

Schedule 5 – Adjustment for costs associated with annual updates to the trailing average cost of debt

The difference in the forecast and actual regulatory rate of return in any **regulatory year** 't' is multiplied by the average of the regulatory asset base (RAB) to determine the change in **Goulburn Valley Water's** total expected return. The RAB is set out in Table 5 of Annexure A.

The trailing average cost of debt adjustment will be apportioned across the tariffs listed in Schedule 5A.

Formula 1: Determining the nominal cost of debt

$$CoD_t^{nominal} = \sum_{i=t-10}^{t-1} \frac{CoD_i^{nominal}}{10}$$

$CoD_t^{nominal}$ Is equal to the simple average of the 10 years up to (but not inclusive of) **regulatory year** 't' of:

- The data series outlined in Table 1 of Annexure A
- and
- RBA Table F3 – Non-financial corporate BBB-rated bonds – Yield – 10 year target tenor [Series ID FNFYBBB10M]

from 1 April to 31 March before the start of **regulatory year** 't' (e.g. 1 April 2017 to 31 March 2018 in relation to 2018-19)

Formula 2: Determining the real cost of debt

$$CoD_t^{real} = \frac{(1 + CoD_t^{nominal})}{(1 + \pi^{det})} - 1$$

π^{det} Is the inflation factor which is equal to 2.3% for all regulatory years

Formula 2 outlines the process for converting the trailing average cost of debt from nominal to real using the Fisher equation.

Schedule 5 – Adjustment for costs associated with annual updates to the trailing average cost of debt

Formula 3: Determining the real regulatory rate of return

$$RRR_t^{real} = 0.4 \times CoE_t^{real} + 0.6 \times CoD_t^{real}$$

RRR_t^{real}	Is the post-tax ‘vanilla’ regulatory rate of return in real terms for regulatory year ‘t’ rounded to two decimal places, i.e. 4.347% is rounded to 4.35%
CoE_t^{real}	Is the real cost of equity determined through Goulburn Valley Water’s PREMO rating, which is equal to 5.3% for 2018-19 to 2022-23

Formula 4: Trailing average cost of debt adjustment

$$CDA_t^j = (RRR_t^{act} - RRR_t^{det}) \times \left(\frac{RAB_{opening,t}^{det} + RAB_{closing,t}^{det}}{2} \right) \times \frac{CPI_t}{CPI_{base}} \times \frac{\alpha_t^j \times q_{j,t}^{det}}{\sum_{j=1,n}^{t=t} (\alpha_t^j \times q_{j,t}^{det})} \times \frac{1}{q_{j,t}^{det}}$$

CDA_t^j	Is the trailing average cost of debt adjustment applied proportionally to tariff j, based on tariff j’s relative share of total revenues. Total revenues refer to the sum of all revenue received across the tariffs listed in Schedule 5A to which the cost of debt adjustment will apply
RRR_t^{act}	Is the actual calculated real post tax ‘vanilla’ regulatory rate of return in regulatory year ‘t’
RRR_t^{det}	Is the determination real post tax ‘vanilla’ regulatory rate of return in regulatory year ‘t’
$RAB_{opening,t}^{det}$	Is the determination opening regulatory asset base in regulatory year ‘t’
$RAB_{closing,t}^{det}$	Is the determination closing regulatory asset base in regulatory year ‘t’
CPI_t	Is the Consumer Price Index: All Groups Index for the Eight Capital Cities as published by the Australian Bureau of Statistics (6401.0 - Table 8) for the March Quarter immediately preceding the start of the relevant regulatory year
CPI_{base}	Is the Consumer Price Index: All Groups Index for the Eight Capital Cities as published by the Australian Bureau of Statistics (6401.0 - Table 8) for the March Quarter in year 2017 equal to 110.5
α_t^j	Is the price for tariff j at regulatory year ‘t’ before the cost of debt adjustment where: $\alpha_t^j = p_{t-1}^j \times \frac{CPI_t}{CPI_{t-1}} \times (1 + PPM_t^j)$

Schedule 5 – Adjustment for costs associated with annual updates to the trailing average cost of debt

p_{t-1}^j	Is the price for tariff j in regulatory year 't-1'
$q_{j,t}^{det}$	Is the determination quantity for tariff j in regulatory year 't'
$\sum_{j=1,n}^{t=t} (\alpha_t^j \times q_{j,t}^{det})$	Is the sum of all revenue received across the tariffs listed in Schedule 5A to which the cost of debt adjustment will apply

Formula 4 outlines the process for calculating the adjustment to prices outlined in Schedule 5A to reflect the new cost of debt. This is done in two steps. The first step is to calculate the change in the revenue requirement by multiplying the adjustment to the rate of return, to reflect the updated cost of debt, by the average regulatory asset base.

The second step is to apply the change in the revenue requirement proportionally to tariff j, based on tariff j's relative share of total revenues. Total revenues are defined as the sum of all revenues received across the tariffs listed in Schedule 5A to which the cost of debt adjustment will apply.

Formula 5: Schedule 5A tariffs

$$p_t^{j,COD} = p_{t-1}^j \times \frac{CPI_t}{CPI_{t-1}} \times (1 + PPM_t^j) + CDA_t^j$$

$p_t^{j,COD}$	Is the price for tariff j at regulatory year 't' that accounts for the cost of debt adjustment. The cost of debt adjustment will apply to the tariffs listed in Schedule 5A
p_{t-1}^j	Is the price for tariff j in regulatory year 't-1'
CPI_t	Is the Consumer Price Index: All Groups Index for the Eight Capital Cities as published by the Australian Bureau of Statistics (6401.0 - Table 8) for the March Quarter immediately preceding the start of the relevant regulatory year
PPM_t^j	The prescribed price movement for the price component for tariff j in regulatory year 't' as per the determination
CDA_t^j	Is the trailing average cost of debt adjustment applied proportionally to tariff j, based on tariff j's relative share of total revenues as outlined in formula 4. Total revenues refer to the sum of all revenue received across the tariffs listed in Schedule 5A to which the cost of debt adjustment will apply.

Schedule 5 – Adjustment for costs associated with annual updates to the trailing average cost of debt

**The Common Seal of the
Essential Services
Commission** was affixed to
this Determination with the
authority of the commission.



Date: 19 June, 2018

Dr Ron Ben-David

Chairperson

Annexure A

Table 1 Historical cost of debt (nominal)

Per cent

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Cost of debt	6.92%	7.36%	7.05%	6.31%	5.27%	7.05%	5.36%	5.27%	4.91%	4.53%

Table 2 Forecast real regulatory rate of return

Per cent

	2018-19	2019-20	2020-21	2021-22	2022-23
Regulatory rate of return	4.29%	4.29%	4.29%	4.29%	4.29%

Table 3 Benchmark revenue requirement

\$m 2017-18

	2018-19	2019-20	2020-21	2021-22	2022-23
Operating expenditure	46.4	46.4	46.3	46.2	45.5
Return on assets	15.4	16.1	16.9	17.4	17.8
Regulatory depreciation	11.0	11.9	12.9	14.0	13.6
Adjustments from last period	0.0	0.0	0.0	0.0	0.0
Non-prescribed revenue offset of revenue requirement	-0.5	-0.5	-0.5	-0.5	-0.5
Tax allowance	0.0	0.0	0.0	0.0	0.0
Notional revenue requirement	72.3	73.9	75.5	77.1	76.4
Additional efficiencies required	3.5	1.4	-0.8	-3.0	-2.9
Final decision revenue requirement	75.8	75.3	74.7	74.1	73.5

Table 4 Updated regulatory asset base
\$m 2017-18

	2012-13	2013-14	2014-15	2015-16	2016-17
Opening RAB at 1 July	271.2	277.8	289.8	307.9	320.2
<i>Plus</i> Gross capital expenditure	20.1	24.0	32.0	26.8	34.2
<i>Less</i> Government contributions	1.4	0.0	0.6	0.6	1.6
<i>Less</i> Customer contributions	1.2	1.7	2.0	1.7	2.1
<i>Less</i> Proceeds from disposals	0.6	0.8	1.1	1.0	0.7
<i>Less</i> Regulatory depreciation	10.3	9.5	10.2	11.1	12.0
Closing RAB at 30 June	277.8	289.8	307.9	320.2	337.9

Table 5 Rolled forward regulatory asset base
\$m 2017-18

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Opening RAB at 1 July	337.9	351.4	367.3	384.9	401.0	409.4
<i>Plus</i> Gross capital expenditure	29.0	29.1	32.2	31.3	24.6	27.7
<i>Less</i> Government contributions	0.5	0.0	0.0	0.0	0.0	0.0
<i>Less</i> Customer contributions	1.4	1.5	1.5	1.5	1.6	1.6
<i>Less</i> Proceeds from disposals	0.7	0.7	1.2	0.8	0.8	0.8
<i>Less</i> Regulatory depreciation	12.8	11.0	11.9	12.9	14.0	13.6
Closing RAB at 30 June	351.4	367.3	384.9	401.0	409.4	421.1

Table 6 **Approved licence fee and environmental contribution assumptions**
\$m 2017-18

	2018-19	2019-20	2020-21	2021-22	2022-23
Essential Services Commission licence fee	0.04	0.04	0.04	0.04	0.06
Department of Health and Human Services licence fee	0.03	0.03	0.03	0.03	0.03
Environment Protection Authority licence fee	0.09	0.09	0.09	0.09	0.09
Environmental contribution	3.41	3.34	3.26	3.19	3.12

Table 7 **Bulk water purchases**
\$m 2017-18

	2018-19	2019-20	2020-21	2021-22	2022-23
Bulk water purchases	1.07	1.07	1.11	1.13	1.08

Table 8 **Demand forecast**

	2018-19	2019-20	2020-21	2021-22	2022-23
Water assessments (no.)					
Total	59,352	60,114	60,890	61,669	62,464
Sewerage assessments (no.)					
Residential	47,120	47,773	48,436	49,103	49,784
Non-residential	5,173	5,245	5,317	5,391	5,465
Total	52,293	53,017	53,754	54,494	55,249
Billable water consumption (ML)					
Total	24,669	24,832	24,996	25,160	25,328

Table 9 Major capital projects

Projects	Expected start date	Expected completion date
Shepparton outfall rising main replacement	2017-18	2019-20
Broadford water treatment plant upgrade	2017-18	2020-21
Shepparton wastewater management facility high rate anaerobic lagoon cover replacement	2016-17	2020-21
Seymour sewer pump station no.1 rising main replacement	2019-20	2020-21
Shepparton raw water pump station augmentation	2017-18	2021-22
Kilmore wastewater management facility offsets	2017-18	2021-22
Replacement of Abbinga reservoir	2021-22	2022-23
Climate change mitigation strategy	2017-18	2023-24
Nathalia treated water pipeline	2020-21	2023-24
Digital enablement strategy	2017-18	2024-25