



# Western Water Determination

1 July 2020 – 30 June 2023

10 June 2020



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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 10 June 2020, the commission made its decision under the **WIRO** in respect of:
- (i) the prices which Western Region Water Corporation (trading as Western Water) (ABN 67 433 835 375) (**Western Water**) may charge for **prescribed services** during the **regulatory period**; and
  - (ii) the standards and conditions of service and supply which **Western 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 **Western 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 16 June 2020.
- (f) For all purposes of this determination, the **prescribed services** provided by **Western Water** comprising a retail water service, a retail sewerage service, a trade waste service, a retail recycled water service, and services to which developer charges apply, as defined in the **WIRO**, are each considered to be a single service encompassing different price components to which different tariffs apply. Price components and tariffs for these services are specified in Schedule 2. Principles to

be used for calculating the price components and tariffs for a retail recycled water service are specified in Schedule 4.

## 1.2. Application

This determination applies to **Western Water** and its successors and assigns in respect of the business carried on by **Western 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 2020, and 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 **Western 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 **Western Water**, extend or reduce the time by which, or the period within which, **Western 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**

- (a) For convenience, Annexure A to this determination summarises:
  - (i) the assumptions underpinning the prices to apply to ***Western 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 ***Western 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**

**Western 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 **Western Water** in respect of **prescribed services** during the **regulatory period**.

(c) **Pricing principles**

During the **regulatory period**, **Western 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 **Western Water** has entered into a contract (a **relevant contract**) which relates to the provision of **prescribed services** prior to 1 July 2020, **Western 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**

**Western 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**

**Western 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 **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**:

(ii)

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

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.

- (iii) 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**, **Western 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 **Western Water** within 20 **business days** after 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 **Western Water** (including a statement of its reasons);

- (B) may request **Western Water** to provide any additional information specified by the commission;
- (C) will take any additional information provided by **Western 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 **Western 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

**Western 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) **Western 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 **Western Water** is complying with this determination.
- (b) Without limiting clause 2.5(a), if, during the **regulatory period**, **Western Water** enters into a **new contract** which relates to the provision of a **prescribed service** to which the pricing principles in Schedule 4 relate, **Western 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 **Western 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 **Western 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, **Western 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) **Western Water** may apply in a **regulatory year** 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 **Western 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, excluding annual adjustments to desalination costs, bulk charges and desalination water order costs.

$q_{t-2}^{ij}$  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

- (iii) An increase in any scheduled price in Schedule 2, in any regulatory year must not exceed the weighted average of all scheduled price increases in that regulatory year by more than 10% in real terms.

**(b) Amendment procedure**

- (i) An application by **Western 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 **Western Water** proposed in its price submission and 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 **Western 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 **Western 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 **Western Water** under this clause 3 if it is satisfied that:

- (A) **Western 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 **revised tariff strategy**;
  - (D) **Western 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) **Western 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 **Western 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 officers of the commission have not provided notice to **Western Water** within 40 **business days** from the date of its receipt of **Western Water's** application under this clause 3 specifying that the application is supported in principle subject to any reasonable revisions to be proposed by **Western Water** to enable the commission to finally approve the **revised tariff schedule** to apply for the **relevant regulatory year** and for all subsequent **regulatory years** remaining in the **regulatory period**.
  - (v) An approved **revised tariff schedule** will be taken to amend Schedule 2 to the extent of any inconsistency.
- (c) Guidelines
- Western 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 2 relates.

## 4. Uncertain or unforeseen events

### 4.1. General principle

- (a) **Western 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 **Western Water** and/or increased or decreased revenue received by **Western 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 **Western Water** makes an application under clause 4.1(a), **Western 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 and other considerations listed in the WIRO. 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 **Western 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 **Western 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 **Western Water** in one or more **regulatory years** during the **regulatory period**; and

- (iv) 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 **Western Water's** control;
- (ii) were or should have been known by **Western Water** at the time the determination was made;
- (iii) could reasonably have been foreseen by **Western Water**;
- (iv) should be or should have been planned for or managed by **Western Water**; and/or
- (v) reflect inefficient expenditure by **Western 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 **Western 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 **Western Water**.
- (iii) The commission may request **Western 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 **Western Water** may charge for **prescribed services** in the **next regulatory period**.

**(c) Processes for considering an uncertain events application**

The commission will specify the processes to be followed by **Western Water** to enable the commission to consider an uncertain events application. **Western Water** is obliged to follow these processes.

## 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, such an 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 section 4F of 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 2020 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 ' $\Sigma$ ' 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	PPM	PPM
	(1 July 2020)	Year 2	Year 3
<b>1.1 Residential water tariff</b>			
Service charge (per annum)			
20 mm	207.81	3.19%	3.15%
25 mm	342.52	3.19%	3.15%
32 mm	581.41	3.19%	3.15%
40 mm	926.29	3.19%	3.15%
50 mm	1,465.16	3.19%	3.15%
80 mm	3,800.27	3.19%	3.15%
100 mm	5,955.75	3.19%	3.15%
150 mm	13,440.08	3.19%	3.15%
Usage charge block 1 (0-440 litres/day) (per kL)	1.8987	5.77%	5.77%
Usage charge block 2 (441-880 litres/day) (per kL)	2.5192	5.77%	5.77%
Usage charge block 3 (881+ litres/day) (per kL)	3.9366	6.40%	6.40%
<b>1.2 Non-residential water tariff</b>			
Service charge – commercial / free access / benevolent (per annum)			
20 mm	207.81	3.19%	3.15%
25 mm	342.52	3.19%	3.15%
32 mm	581.41	3.19%	3.15%
40 mm	926.29	3.19%	3.15%
50 mm	1,465.16	3.19%	3.15%
80 mm	3,800.27	3.19%	3.15%
100 mm	5,955.75	3.19%	3.15%
150 mm	13,440.08	3.19%	3.15%
Usage charge (per kL)	2.5192	5.77%	5.77%

Tariff and Price Component	Price	PPM	PPM
	(1 July 2020)	Year 2	Year 3
<b>1.3 Residential sewerage tariff</b>			
Sewer service charge (per annum)	478.86	3.19%	3.15%
<b>1.4 Non-residential sewerage tariff</b>			
Service charge – commercial / free access / benevolent (per annum)	478.86	3.19%	3.15%
<b>1.5 Residential and non-residential recycled water tariff – class A</b>			
Service charge (per annum)			
20 mm	115.63	0.00%	0.00%
25 mm	180.72	0.00%	0.00%
32 mm	296.08	0.00%	0.00%
40 mm	462.65	0.00%	0.00%
50 mm	722.91	0.00%	0.00%
80 mm	1,850.70	0.00%	0.00%
100 mm	2,891.77	0.00%	0.00%
150mm	6,506.50	0.00%	0.00%
Usage charge class A recycled water – residential (per kL)	1.8987	0.00%	0.00%
<b>1.6 Trade waste charges</b>			
Application fee – risk rank 1 (per application)	143.33	0.00%	0.00%
Application fee – risk rank 2 (per application)	225.30	0.00%	0.00%
Application fee – risk rank 3 (per application)	418.28	0.00%	0.00%
Application fee – risk rank 4 (per application)	991.99	0.00%	0.00%
Management fee – risk rank 1 (per annum)	278.52	0.00%	0.00%
Management fee – risk rank 2 (per annum)	584.26	0.00%	0.00%
Management fee – risk rank 3 (per annum)	1,306.25	0.00%	0.00%
Management fee – risk rank 4 (per annum)	2,657.56	0.00%	0.00%
Volumetric charge – category B (per kL)	1.7383	0.00%	0.00%
Volumetric charge – category C (per kL)	1.2169	0.00%	0.00%
<b>1.7 Trade waste quality charges — risk ranks 2, 3 and 4 (per kg)</b>			
BOD >400mg/L	0.3514	0.00%	0.00%

Tariff and Price Component	Price	PPM	PPM
	(1 July 2020)	Year 2	Year 3
Suspended solids >400mg/L	0.2239	0.00%	0.00%
Total phosphorus >30mg/L	0.5232	0.00%	0.00%
Total combined nitrogen >60mg/L	0.6729	0.00%	0.00%
Total oxidisable sulphur >100mg/L	0.9723	0.00%	0.00%
Sodium >250mg/L	0.1488	0.00%	0.00%
Arsenic >0.2g/day	0.2238	0.00%	0.00%
Heavy metals — Cadmium >0.4g/day	0.2238	0.00%	0.00%
Heavy metals — Chromium (III & VI) >100g/day	0.2238	0.00%	0.00%
Heavy metals — Copper >100g/day	0.2238	0.00%	0.00%
Heavy metals — Lead >100g/day	0.2238	0.00%	0.00%
Heavy metals — Mercury >0.2 g/day	0.2238	0.00%	0.00%
Heavy metals — Nickel >10g/day	0.2238	0.00%	0.00%
Heavy metals — Selenium >10g/day	0.2238	0.00%	0.00%
Heavy metals — Zinc >100g/day	0.2238	0.00%	0.00%
<b>1.8 Trade waste penalty units</b>			
1st major breach	180.00	0.00%	0.00%
2nd major breach	380.00	0.00%	0.00%
3rd major breach	850.00	0.00%	0.00%
4th major breach	1730.00	0.00%	0.00%
<b>1.9 Customer contribution (per lot)</b>			
Customer contribution — Infill	2,755.41	0.00%	0.00%
Customer contribution — Greenfields	5,786.38	5.00%	5.00%
<b>2.0 Miscellaneous fees and charges</b>			
Water tapping fees – drinking and recycled water			
20 mm installation	444.84	0.00%	0.00%
25 mm installation	821.23	0.00%	0.00%
32 mm installation	1,728.09	0.00%	0.00%
40 mm installation	2,241.27	0.00%	0.00%
50 mm installation	3,438.92	0.00%	0.00%
Water meter test – 20mm to 32mm (per test)	119.80	0.00%	0.00%
Conditions of connection – sewer			
Residential standard (per application)	222.30	0.00%	0.00%



Tariff and Price Component	Price	PPM	PPM
	(1 July 2020)	Year 2	Year 3
Commercial standard (per application)	307.92	0.00%	0.00%
Information statements – standard	68.32	0.00%	0.00%
Special meter reads	27.63	0.00%	0.00%
Recycled water inspection	368.73	0.00%	0.00%
Plugging fees – drinking and recycled water	162.95	0.00%	0.00%
Pressure and flow information	319.99	0.00%	0.00%
Disposal of septic waste to treatment plants			
per load	450.59	0.00%	0.00%
per kL	58.3793	0.00%	0.00%
Non-core miscellaneous services	Actual cost	Actual cost	Actual cost

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 **Western 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 responsibility of **Western Water** to ensure its tariffs are authorised by the **Water Act 1989 (Vic)** and are applied to customers in accordance with this Act and this determination. The commission does not have a role in hearing or resolving disputes regarding the lawfulness of **Western Water's** charges.

## Schedule 3 – Application principles to apply to prices

### 3.1 Assignment of trade waste customers

The determination of Risk Ranking uses a combination of Australian & New Zealand Standard Industry Classification (ANZSIC) codes, number of type(s) of activities generating trade waste, the number and the degree of hazardous substances used in the process (or stored on site which may enter the sewerage system), and previous compliance history.

### 3.2 Vacant land service charges

It is the role of **Western Water** to ensure that its service fees for water and sewerage services on vacant land are in accordance with the **Water Act**.

### 3.3 Inclining block tariffs

Where multiple customers are being serviced by a single meter, the consumption tiers will be applied on a pro-rata basis.

### 3.4 Miscellaneous fees and charges

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

Miscellaneous service	Definition
<b>Conditions of connection – sewer (per application)</b>	Administration charge associated with the assessment of the customer connection to the sewer. A copy of plans is attached with details for the plumber/drainer to allow for connection. Any issues with connection, including cost for Clerk of Works inspections are included in the cost.
<b>Plan copy sewer (per item) – see size depth offset request</b>	Copy of plan with details advising of the size of the <b>Western Water</b> sewer main, depth and offset and is provided on a form to customer requesting. This enables a plumber to implement the premise connection to sewer. Backflow Prevention Assessment of application risk rating, determination of backflow requirements and preparation and execution of customer backflow agreement. May require site assessment visits.
<b>Pressure and flow information (per application)</b>	Administration fee associated with a customer request for field assessment of water flow and pressure. The fee also covers preparation of a report and any water consumption.
<b>Annual inspection fee (per item)</b>	Fee for inspections by <b>Western Water</b> (or delegated contractors) for fire services, backflow or recycled water connections.

Miscellaneous service	Definition
<b>Sealing and resealing fire hose taps</b>	Fee associated with the field inspection and resealing of fire hose taps following installation and/or fire service use.
<b>Plugging fees – potable and recycled (per item)</b>	Fee to process application and field inspections to ensure that the plugging has been completed and that the water meter is being returned for final read following removal of a connection.
<b>Size depth and offset information (per item)</b>	Fee to determine size, depth and offset (i.e. three dimensional location) of sewer assets to allow a customer to connect to sewer.
<b>Build over applications</b>	Fee for detailing information, assessment of risk and providing consent for building close to or over <b>Western Water</b> assets. For larger works, field inspection may be required.
<b>Swimming pool backwash approval (per item)</b>	Fee for the assessment and consent for swimming pool backwash water flows to be connected to local sewers.
<b>Developer financed works</b>	Fees for the assessment of feasibility, design assessment, construction supervision and quality control of developer financed works.
<b>Recycled water inspection fees</b>	Fees associated with field inspections of Class A recycled water residential installations. Three inspections are required at differing construction stages. <b>Western Water</b> manages the administration of this fee on behalf of the Plumbing Industry Commission.
<b>Water meter test – (20-32mm) per test</b>	Fee applied if testing for the accuracy of meter is requested by the customer and is returned with no issues.
<b>Information statements</b>	Information statements are certificates issued by <b>Western Water</b> that provide rate and encumbrance information to solicitors or conveyancers, representing the vendor and purchaser of a property. The solicitors and conveyancers then use the information to prepare statements under Section 32 of the <i>Sale of Land Act</i> and at settlement of the property, to adjust charges between the vendor and purchaser.
<b>Water tapping fees – potable and recycled water (per tapping)</b>	20mm-50mm meters and includes the cost of the meter and tapping materials, assessment of network flows and the field team installation. Also includes the administration for the application to be processed. The differing costs relate to the higher flows (and therefore risk) associated with meters and tapplings of increasing size. Costs cover both dry (empty pipe) and wet (pressured pipe) tapplings.

## 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 **Western 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 **Western Water** or pursuant to other government policies that apply to **Western 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 (i.e. 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.

#### NCC application

NCC are applied on a per lot basis, and may be levied on any connection of a new customer that is separately titled or is, or can be, individually metered.

#### Incremental financing costs

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

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

where:

**r** estimated pre-tax regulatory rate of return.

**n** the number of years the asset is required sooner than planned.

## Gifted Assets

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

- makes clear to potential developers which assets a developer will be responsible for providing and gifting, and which will be provided by **Western Water**;
- confirms that negotiation of any non-standard connection and associated charges will be undertaken in accordance with **Western 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

**Western 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 changes in costs associated with Melbourne Water Corporation and Southern Rural Water Corporation bulk water charges and with annual updates to the trailing average cost of debt

If in any **regulatory year** Condition A and/or Condition B and/or Condition C as specified in Schedule 5B 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 (being the prices set out in items 1.1, 1.2, 1.3, 1.4 and 1.5 of Schedule 2 of this determination).

Instead the prices above will be adjusted in accordance with the formulas (as applicable) specified in Schedule 5B, with effect from the beginning of each subsequent **regulatory year** in the **regulatory period**.

**Western Water** must comply with any guidance issued by the commission from time to time which relate to the adjustment of costs associated with Melbourne Water Corporation and Southern Rural Water Corporation bulk water charges, and any annual updates to the trailing average cost of debt, and consequential adjustments 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)	Condition B (Melbourne Water bulk water headworks and transfer cost change)	Condition C (Southern Rural Water bulk water cost change)
1.1 Residential water tariff – service charge	X	X	X
1.1 Residential water tariff – usage charges	X		
1.2 Non-residential water tariff – service charge	X	X	X
1.2 Non-residential water tariff – usage charges	X		
1.3 Residential sewerage tariff	X		
1.4 Non-residential sewerage tariff	X		
1.5 Residential and non-residential recycled water tariff – class A – Usage 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.

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 **Western 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.

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



### Formula 1: Determining the nominal cost of debt

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

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$CoD_t^{nominal}$  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 2019 to 31 March 2020 in relation to 2020-21)

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### Formula 2: Determining the real cost of debt

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

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$\pi^{det}$  Is the inflation factor which is equal to 1.7% for all regulatory years

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

### Formula 3: Determining the real regulatory rate of return

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

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$RRR_t^{real}$  Is the post-tax 'vanilla' regulatory rate of return in real terms for **regulatory year 't'** rounded to two decimal places, i.e. 3.723% is rounded to 3.72%

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$CoE_t^{real}$  Is the real cost of equity determined through **Western Water's** PREMO rating, which is equal to 3.9% for 2020-21 to 2022-23

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

#### 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 <b>regulatory year 't'</b>
$RRR_t^{det}$	Is the determination real post tax 'vanilla' regulatory rate of return in <b>regulatory year 't'</b>
$RAB_{opening,t}^{det}$	Is the determination opening regulatory asset base in <b>regulatory year 't'</b>
$RAB_{closing,t}^{det}$	Is the determination closing regulatory asset base in <b>regulatory year 't'</b>
$CPI_t$	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 <b>regulatory year</b>
$CPI_{base}$	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 2019 equal to 114.1
$\alpha_t^j$	Is the price for tariff j at <b>regulatory year 't'</b> before the cost of debt adjustment where: <div style="text-align: center;"> <math display="block">\alpha_t^j = p_{t-1}^j \times \frac{CPI_t}{CPI_{t-1}} \times (1 + PPM_t^j)</math> </div>
$p_{t-1}^j$	Is the price for tariff j in <b>regulatory year 't-1'</b>
$q_{j,t}^{det}$	Is the determination quantity for tariff j in <b>regulatory year 't'</b>
$\sum_{j=1,n}^{t=t} (\alpha_t^j \times q_{j,t}^{det})$	Is the sum of all revenue received across the tariffs listed in Schedule 5A to which the cost of debt adjustment will apply

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

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 <b>regulatory year</b> '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 <b>regulatory year</b> '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 <b>regulatory year</b> '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.

#### Condition B – Bulk water headworks and transfer cost adjustments – Melbourne Water

Condition B will apply when **Melbourne Water's** bulk water headworks and transfer cost in any **regulatory year** 't' differ from forecast in that year. The changes in costs will be calculated in accordance with formula 7 and apply to the tariffs listed in Schedule 5A.

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

### Condition C – Bulk water entitlement cost adjustments – Southern Rural Water

Condition C will apply when **Southern Rural Water’s** bulk water costs in any **regulatory year** ‘t’ differ from forecast in that year. The changes in costs will be calculated in accordance with formula 8 and apply to the tariffs listed in Schedule 5A.

#### Formula 6: Water service charge

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

$p_{WS,t}^j$	The water service charge for tariff j in <b>regulatory year</b> ‘t’ as a result of changes in <b>Western Water’s</b> trailing average cost of debt, <b>Melbourne Water’s</b> bulk water headworks costs and <b>Southern Rural Water’s</b> bulk water costs
$p_{WS,t-1}^j$	Is the water service charge for tariff j in <b>regulatory year</b> ‘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 <b>regulatory year</b>
$PPM_t^j$	The prescribed price movement for the price component for tariff j in <b>regulatory year</b> ‘t’ as per the determination
$BWA_{WS,t}^j$	Is the bulk water headworks and transfer price adjustment applied to <b>Western Water’s</b> water service tariff j in <b>regulatory year</b> ‘t’ to account for changes in <b>Melbourne Water’s</b> trailing average cost of debt and bulk water transfer costs as outlined in formula 7
$SRWA_{WS,t}^j$	Is the bulk water price adjustment applied to <b>Western Water’s</b> water service tariff j in <b>regulatory year</b> ‘t’ to account for changes in <b>Southern Rural Water’s</b> bulk water entitlement costs as outlined in formula 8
$CDA_t^j$	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

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

## Formula 7: Bulk water headworks and transfer cost adjustment

$$BWA_{WS,t}^j = PT_{WS,t}^{MW} \times \frac{\alpha_{WS,t}^j \times q_{WS,t}^{j,det}}{\sum_j^n (\alpha_{WS,t}^j \times q_{WS,t}^{j,det})} \times \frac{1}{q_{WS,t}^{j,det}}$$

$BWA_{WS,t}^j$  is the price adjustment to the water service charge for tariff j ( $p_{WS,t}^j$ ) from changes to **Melbourne Water's** bulk headworks and transfer costs ( $PT_{WS,t}^{MW}$ ) as a proportion of the total water service revenue  $\sum_j^n (\alpha_{WS,t}^j \times q_{WS,t}^{j,det})$ .

$PT_{WS,t}^{MW}$  Is the total amount of expenditure to be passed through (either positive or negative) in **regulatory year** 't' on the water fixed service charges to account for changes in **Melbourne Water's** bulk headworks and transfer costs.

$\alpha_{WS,t}^j$  The water fixed service charge for tariff j in **regulatory year** 't' before the bulk headworks cost and cost of debt adjustments where:

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

$q_{WS,t}^{j,det}$  Is the determination quantity for tariff j in **regulatory year** 't'

$\sum_j^n (\alpha_{WS,t}^j \times q_{WS,t}^{j,det})$  Is the sum of all revenue received across water fixed service charges in **regulatory year** 't'

## Formula 8: Bulk water entitlement cost adjustment – Southern Rural Water

$$SRWA_{WS,t}^j = PT_{WS,t}^{SRW} \times \frac{\alpha_{WS,t}^j \times q_{WS,t}^{j,det}}{\sum_j^n (\alpha_{WS,t}^j \times q_{WS,t}^{j,det})} \times \frac{1}{q_{WS,t}^{j,det}}$$

$SRWA_{WS,t}^j$  is the price adjustment to the water service charge for tariff j ( $p_{WS,t}^j$ ) from changes to **Southern Rural Water's** bulk water entitlement costs ( $PT_{WS,t}^{SRW}$ ) as a proportion of the total water service revenue  $\sum_j^n (\alpha_{WS,t}^j \times q_{WS,t}^{j,det})$ .

$PT_{WS,t}^{SRW}$  Is the total amount of expenditure to be passed through (either positive or negative) in **regulatory year** 't' on the water fixed service

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

	charges to account for changes in <b>Southern Rural Water's</b> bulk water entitlement costs.
$\alpha_{WS,t}^j$	The water fixed service charge for tariff j in <b>regulatory year</b> 't' before the bulk headworks cost and cost of debt adjustments where: $\alpha_{WS,t}^j = p_{WS,t-1}^j \times \frac{CPI_t}{CPI_{t-1}} \times (1 + PPM_t^j)$
$q_{WS,t}^{j,det}$	Is the determination quantity for tariff j in <b>regulatory year</b> 't'
$\sum_j^n (\alpha_{WS,t}^j \times q_{WS,t}^{j,det})$	Is the sum of all revenue received across water fixed service charges in <b>regulatory year</b> 't'

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: 15 June 2020



A handwritten signature in blue ink, written over a horizontal line. The signature is cursive and appears to be 'Kate Symons'.

**Kate Symons**

**Chairperson**

## Annexure A

**Table 1** Historical cost of debt (nominal)

Per cent

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Cost of debt	7.05%	6.31%	5.27%	7.05%	5.36%	5.27%	4.91%	4.53%	4.61%	3.31%

**Table 2** Forecast real regulatory rate of return

Per cent

	2020-21	2021-22	2022-23
Regulatory rate of return	3.72%	3.72%	3.72%

**Table 3** Benchmark revenue requirement

\$m 2019-20

	2020-21	2021-22	2022-23
Operating expenditure	61.4	63.1	64.2
Return on assets	21.1	23.2	25.7
Regulatory depreciation	13.0	13.4	15.2
Adjustments from last period	0.0	0.0	0.0
Non-prescribed revenue offset of revenue requirement	-0.1	-0.1	-0.1
Tax allowance	1.3	0.5	0.0
<b>Final decision revenue requirement</b>	<b>96.7</b>	<b>100.2</b>	<b>105.0</b>



**Table 4 Updated regulatory asset base**

\$m 2019-20

	2017-18	2018-19
Opening RAB at 1 July	416.8	458.4
<i>Plus</i> Gross capital expenditure	64.8	71.0
<i>Less</i> Government contributions	0.0	0.0
<i>Less</i> Customer contributions	15.2	20.4
<i>Less</i> Proceeds from disposals	0.5	0.5
<i>Less</i> Regulatory depreciation	7.4	6.7
<b>Closing RAB at 30 June</b>	<b>458.4</b>	<b>501.7</b>

**Table 5 Rolled forward regulatory asset base**

\$m 2019-20

	2019-20	2020-21	2021-22	2022-23
Opening RAB at 1 July	501.7	539.5	593.1	654.8
<i>Plus</i> Gross capital expenditure	74.7	90.3	93.7	98.3
<i>Less</i> Government contributions	0.0	0.0	0.0	0.0
<i>Less</i> Customer contributions	27.8	23.0	17.7	12.5
<i>Less</i> Proceeds from disposals	0.8	0.8	0.8	0.8
<i>Less</i> Regulatory depreciation	8.3	13.0	13.4	15.2
<b>Closing RAB at 30 June</b>	<b>539.5</b>	<b>593.1</b>	<b>654.8</b>	<b>724.5</b>

**Table 6** Approved licence fee and environmental contribution assumptions

\$m 2019-20

	2020-21	2021-22	2022-23
Essential Services Commission licence fee	0.04	0.04	0.06
Department of Health and Human Services licence fee	0.03	0.03	0.03
Environment Protection Authority licence fee	0.05	0.05	0.05
Environmental contribution	3.03	2.98	2.93

**Table 7** Bulk water purchases

\$m 2019-20

	2020-21	2021-22	2022-23
Bulk water purchases	12.88	12.92	13.54

**Table 8** Demand forecast

	2020-21	2021-22	2022-23
<b>Water assessments (no.)</b>			
Residential	57,849	60,825	63,569
Residential - landlord & vacant land	17,399	18,292	19,115
Non-residential	3,375	3,508	3,638
Total	78,622	82,624	86,321
<b>Sewerage assessments (no.)</b>			
Residential	52,344	55,290	58,013
Residential - landlord & vacant land	17,115	17,995	18,808
Non-residential	2,895	3,028	3,158
Total	72,354	76,313	79,979
<b>Billable water consumption (kL)</b>			
Residential	13,039,265	13,705,178	14,301,418
Non-residential	2,307,809	2,412,513	2,520,822
Total	15,347,074	16,117,691	16,822,240

Annexure A

**Table 9 Major capital projects**

Projects	Expected start date	Expected completion date
Grant Street SPS Upgrade	2018-19	2021-22
Beattys Rd East Trunk Water Main	2019-20	2021-22
Melton RWP and Bacchus Marsh RWP Interconnection	2018-19	2022-23
Sunbury Outfall Sewer Duplication	2018-19	2022-23
Melton RWP - Convert Aeration tank 5 & 6 to IFAS	2020-21	2022-23
Derrimut Diversion SPS/RM	2018-19	2023-24
Gisborne RWP - Stage 1 Bioreactor	2018-19	2023-24
Melton RWP - Additional on-site recycled water storage - Stage 1	2018-19	2023-24
Parwan-Balliang Irrigation District network (WIN Stage 1)	2019-20	2023-24
SSPS - Sewer Relining Program	Ongoing	Ongoing