



Melbourne Water Determination

1 July 2021 – 30 June 2026

16 June 2021



An appropriate citation for this paper is:

Essential Services Commission 2021, Melbourne Water Determination: 1 July 2021 – 30 June 2026, 16 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 date 16 June 2021, the commission made its decision under the **WIRO** in respect of:
 - (i) the prices which Melbourne Water Corporation (trading as Melbourne Water) (ABN 81 945 386 953) (**Melbourne Water**) may charge for **prescribed services** during the **regulatory period**; and
 - (ii) the standards and conditions of service and supply which **Melbourne 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 **Melbourne 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 2021.
- (f) For all purposes of this determination, the **prescribed services** provided by **Melbourne Water** comprising storage operator and bulk water services, bulk sewerage services, bulk recycled water services and metropolitan waterways and drainage services 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.

1.2. Application

This determination applies to **Melbourne Water** and its successors and assigns in respect of the business carried on by **Melbourne 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 2021, 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 2026.

(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 2026, 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 **Melbourne Water** between 1 July 2026 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 **Melbourne Water**, extend or reduce the time by which, or the period within which, **Melbourne 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 (or, where only used within a clause, the meaning given upon their first use); 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 ***Melbourne Water*** during the ***regulatory period*** or the manner in which such prices are to be calculated, determined or otherwise regulated.
- (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**

Melbourne 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, in accordance with Schedule 3, Schedule 4 and Schedule 5.

(b) **Application principles**

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

(c) **Pricing principles**

During the **regulatory period**, **Melbourne 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.

(d) **Adjustment for changes in costs associated with the Victorian Desalination Plant and annual updates to the trailing average cost of debt**

During the **regulatory period**, **Melbourne Water** must apply the changes in costs associated with Victorian Desalination Plant and annual updates to the trailing average cost of debt in Schedule 5 when determining the prices to apply to the **prescribed services** to which the adjustments in Schedule 5 relate.

2.2. Ancillary matters

(a) **Contracts**

Where **Melbourne Water** has entered into a contract (a **relevant contract**) which relates to the provision of **prescribed services** prior to 1 July 2021, **Melbourne 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 3 and

Schedule 4, and the adjustments in Schedule 5 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**

Melbourne 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**

Melbourne 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**:

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

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 2026, 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 2026 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**, **Melbourne Water** must submit its calculation of maximum 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 those maximum 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 **Melbourne 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 **Melbourne Water** (including a statement of its reasons);
 - (B) may request **Melbourne Water** to provide any additional information specified by the commission;
 - (C) will take any additional information provided by **Melbourne 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 **Melbourne 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

Melbourne 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) **Melbourne 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 **Melbourne Water** is complying with this determination.
- (b) Without limiting clause 2.5(a), if, during the **regulatory period**, **Melbourne Water** enters into a **new contract** which relates to the provision of a **prescribed service** to which the pricing principles in Schedule 3 and Schedule 4 relate and the adjustment in Schedule 5 relate, **Melbourne 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 **Melbourne 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 **Melbourne 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, **Melbourne 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.

2.6. Return on equity review

- (a) During the **regulatory period**, **Melbourne Water** may apply to the commission for a review of its return on equity allowance.
- (b) **Melbourne Water** must:
 - (i) give the commission at least 12 months' notice before lodging its application under clause 2.6(a); and
 - (ii) comply with any specific guidance issued by the commission from time to time relating to the review of return on equity allowance.
- (c) An application lodged under clause 2.6(a) must include:
 - (i) sufficient information to allow the commission to verify that any proposed adjustment would comply with the **WIRO**;
 - (ii) details of customer outcomes over at least the first two years of the **regulatory period**; and
 - (iii) any other information required by the commission pursuant to guidance issued under clause 2.6(b)(ii).

- (d) The commission may publish any application lodged under clause 2.6(a) and conduct such consultation as it considers appropriate.
- (e) The commission may have regard to any submissions received in response to the application when considering a proposed adjustment to the return on equity allowance.
- (f) The commission will review any application received under clause 2.6(a) within no more than 12 months after it being received and, following its consideration, either:
 - (i) accept the application and update formula 2 to reflect a real return on equity of 4.5 per cent; or
 - (ii) reject the application and maintain the return on equity at the rate outlined in formula 2.
- (g) In making a decision under clause 2.6(f), the commission will take into account the interests of customers and other considerations listed in the **WIRO**.

3. Amendment of Schedule 2

(a) **Amendment**

- (i) **Melbourne Water** may apply in a **regulatory year** to the commission in accordance with this clause 3 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 **Melbourne 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 cost of debt, 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

(b) **Amendment procedure**

- (i) An application by **Melbourne 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 **Melbourne 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 **Melbourne 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 **Melbourne 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 **Melbourne Water** under this clause 3 if it is satisfied that:
- (A) **Melbourne Water** has complied with clause 3(b)(i)(A);
- (B) the average 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) **Melbourne 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) **Melbourne 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 **Melbourne 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 **Melbourne Water** within 40 **business days** from the date of its receipt of **Melbourne Water's** application under this clause 3 specifying that the application is supported in principle subject to any reasonable revisions to be proposed by **Melbourne 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
- Melbourne 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) **Melbourne 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 **Melbourne Water** and/or increased or decreased revenue received by **Melbourne 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 **Melbourne Water** makes an application under clause 4.1(a), **Melbourne 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 **Melbourne 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 **Melbourne Water** on major capital projects;
- (iii) instances where the commission is satisfied that there is a material difference between the forecast demand levels used to set prices and actual

demand levels for **Melbourne 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) or regulations made under any of them;
 - (B) any licence issued pursuant to any of the Acts referred to in clause 4.2(a)(iv)(A);
 - (C) a bulk entitlement under the *Water Act 1989* that is referred to as a Primary Retail Entitlement Holding that affects **Melbourne Water**;
 - (D) a **relevant tax**;
 - (E) the Statement of Obligations; or
 - (F) 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.
 - (G) bulk entitlements under the *Water Act 1989* that is referred to as a Primary Retail Entitlement Holding that affects City West Water and Western Water as a result of the planned integration of those businesses.

(b) **Exclusions**

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

- (i) are or should be within **Melbourne Water's** control;
- (ii) were or should have been known by **Melbourne Water** at the time the determination was made;
- (iii) could reasonably have been foreseen by **Melbourne Water**;
- (iv) should be or should have been planned for or managed by **Melbourne Water**, and/or
- (v) reflect inefficient expenditure by **Melbourne 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 **Melbourne 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 **Melbourne Water**.
- (iii) The commission may request **Melbourne 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 **Melbourne 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 **Melbourne Water** to enable the commission to consider an uncertain events application. **Melbourne 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.

diversion service has the meaning given in the *WIRO*.

Desalination water order management costs means the actual costs of managing the Victorian Desalination Water Order in a given regulatory financial year, calculated as the sum of mechanical and electrical asset maintenance costs, chemical savings and electricity consumption priced at the benchmark electricity price of \$87.10/MWh in 2020-21 dollars. The water order management costs are defined in the table below.

Cost description	Basis
Mechanical and electrical (M&E) asset maintenance (increased maintenance)	Each instance of bladder replacement – sporadic depending on cumulative cycle times year on year – for 5 x back-to-back large orders >125 GL expect to have two bladder replacements within that period.
Chemical savings	125 GL order – fluosilicic acid not required at Silvan and/or Cardinia as desalinated water already contains fluoride.
Electricity (pumping)	125-150 GL order (15-40 GL pumped to Silvan). Assumes 110 GL of desalinated water transferred via gravity to Cardinia Reservoir.

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 2026 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 2021 and ending on 30 June 2026.

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.

waterways and drainage service has the meaning given to the term 'metropolitan waterways and drainage service' in the **WIRO**.

Western Water means *Western Water and its successors and assigns in respect of the business carried on by Western Water at the date of this determination*.

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 for prescribed services

This schedule should be read in conjunction with Schedule 3, Schedule 4 and Schedule 5. Variable water, wastewater, trade waste charges and non-residential waterways and drainage charges in \$NAV are rounded down to 4 decimal places. All other charges are rounded down to 2 decimal places.

Water and Sewerage

Tariff and Price Component	Price (1 July 2021)	PPM Year 2	PPM Year 3	PPM Year 4	PPM Year 5
1.1 Storage operator and bulk water headworks charges – Greater Yarra System – Thomson River (\$/ML entitlement)					
City West Water, South East Water, Yarra Valley Water, Western Water, Barwon Water, Westernport Water, South Gippsland Water	321.18	3.24%	3.24%	3.24%	3.24%
1.2 Storage operator and bulk water headworks charges – Victorian Desalination Plant (\$/ML entitlement)					
City West Water, South East Water, Yarra Valley Water	3,556.64	-1.48%	-2.36%	-3.15%	-2.68%
1.3 Victorian Desalination Project Water Order charge (\$/ML entitlement)					
City West Water, South East Water, Yarra Valley Water	613.76	N/A - Subject to advice			
1.4 Storage operator and bulk water headworks charges – North South Pipeline (\$/ML entitlement)					
City West Water, South East Water, Yarra Valley Water	473.04	0.00%	0.00%	0.00%	0.00%
1.5 Storage operator and bulk water usage charges – Transfer (\$/ML supplied)					
City West Water, South East Water, Yarra Valley Water, Western Water, Barwon Water, Westernport Water, South Gippsland Water	247.4513	3.02%	3.43%	0.70%	1.01%

Tariff and Price Component	Price (1 July 2021)	PPM Year 2	PPM Year 3	PPM Year 4	PPM Year 5
1.6 Bulk water headworks charge - Gippsland Water (\$/month)					
	3,366.90	1.11%	1.11%	1.11%	1.11%
1.7 Bulk sewerage usage charges – Treatment (\$/per ML)					
Western System (City West Water, South East Water, Yarra Valley Water)	60.5678	0.00%	0.00%	0.00%	0.00%
Eastern System (South East Water, Yarra Valley Water)	39.7381	0.00%	0.00%	0.00%	0.00%
1.8 Bulk sewerage usage charges – Transfer (\$/per ML)					
Western System (City West Water, South East Water, Yarra Valley Water)	40.4967	0.00%	0.00%	0.00%	0.00%
Eastern System (South East Water, Yarra Valley Water)	5.7838	0.00%	0.00%	0.00%	0.00%
1.9 Bulk sewerage usage charges – Load (per tonne)					
Biochemical oxygen demand – Eastern System	250.4616	0.00%	0.00%	0.00%	0.00%
Biochemical oxygen demand – Western System	331.9602	0.00%	0.00%	0.00%	0.00%
Suspended solids – Eastern System	579.8940	0.00%	0.00%	0.00%	0.00%
Suspended solids – Western System	543.7960	0.00%	0.00%	0.00%	0.00%
Total kjeldahl nitrogen – Eastern System	70.9826	0.00%	0.00%	0.00%	0.00%
Total kjeldahl nitrogen – Western System	1,130.7681	0.00%	0.00%	0.00%	0.00%
Inorganic total dissolved solids – Western System	32.3163	0.00%	0.00%	0.00%	0.00%
1.10 Bulk sewerage service charge (\$/month)					
City West Water	5,759,223.79	3.24%	3.24%	3.24%	3.24%
South East Water	13,420,443.1				
	8	3.24%	3.24%	3.24%	3.24%
Yarra Valley Water	11,494,338.6				
	5	3.24%	3.24%	3.24%	3.24%

Waterways and Drainage

Tariff and Price Component	Price	PPM	PPM	PPM	PPM
	(1 July 2021)	Year 2	Year 3	Year 4	Year 5

2.1 Waterways and drainage charge – All properties located within the area designated as the Urban Growth Boundary and major airports, except those indicated in 2.2

Residential charge (\$ per annum)	105.58	0.00%	0.00%	0.00%	0.00%
Non-residential charges:					
• Minimum fee (\$ per annum)	158.61	0.00%	0.00%	0.00%	0.00%
• Rate in \$ NAV (cents per annum)	0.4218	0.00%	0.00%	0.00%	0.00%

2.2 Waterways and drainage charge – All non-residential properties included in the waterway management district as a result of extending Melbourne Water’s service area in November 2005 (including all properties within the Shire of Mornington Peninsula), non-residential properties located in the extension of the Urban Growth Boundary since 2010, except those indicated in 2.3

Non-residential charge					
• Minimum fee (\$ per annum)	158.61	0.00%	0.00%	0.00%	0.00%

2.3 Waterways charge – All properties located outside the area designated as the Urban Growth Boundary, except major airports and those indicated in 2.4

• Minimum fee (\$ per annum)	57.97	0.00%	0.00%	0.00%	0.00%
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2.4 Special drainage area charge – All properties in the following parts of the area of the former Dandenong Valley and Western Port Authority as at 5 November 1991, which up to 1997, were subject to a special drainage and river improvement rate

Koo Wee Rup – Longwarry Flood Protection District (\$/per annum)	Continuation of the pricing reform commenced in 2013 and concluding in 2026 which will see Divisions A and B replaced with a single cost-reflective price. Unique price paths apply for all individual properties to transition to the single cost-reflective price. During this regulatory period, the cost of service will be subjected to annual consumer price index adjustments, with customers moving to a higher level of service and covered by a higher average price when customers indicate they are willing to pay for additional service levels.				
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Tariff and Price Component	Price	PPM	PPM	PPM	PPM
	(1 July 2021)	Year 2	Year 3	Year 4	Year 5

Patterson Lakes

• Properties with access to timber jetties	1,433.00	NOM	NOM	NOM	NOM
• Properties with access to concrete jetties	948.00	NOM	NOM	NOM	NOM
• Jetties annual maintenance	137.07	0.00%	0.00%	0.00%	0.00%
• Quiet Lakes Bore Flushing Tariff	128.41	0.00%	0.00%	0.00%	0.00%

For properties that border either Lake Legana or Lake Illawong in the 'Quiet Lakes' area of Patterson Lakes, from 2021-22 an annual tariff per property of up to \$128.41 per annum (not subject to indexation or increase in the period to and including 2020-21).

2.5 Miscellaneous services

• Property information statements (City West Water, South East Water, Yarra Valley Water)	4.86	0.00%	0.00%	0.00%	0.00%
• Flood level certificates	46.28	0.00%	0.00%	0.00%	0.00%
• Flood feasibility study (\$ per half day)	848.91	0.00%	0.00%	0.00%	0.00%

Hydrological data

• Storm frequency analysis for selected storm events	152.61	0.00%	0.00%	0.00%	0.00%
• Hydrological data (\$ per dataset – daily, hourly, 6 minute)	94.90	0.00%	0.00%	0.00%	0.00%
• Other requests (\$ per hour)	152.61	0.00%	0.00%	0.00%	0.00%

Construction, works & connections

• Application/ connection fee	159.27	0.00%	0.00%	0.00%	0.00%
• Inspection fee	438.78	0.00%	0.00%	0.00%	0.00%
• Application fee for construction over or near Melbourne Water easements or assets	215.42	0.00%	0.00%	0.00%	0.00%
• Fast track assessments	1,103.90	0.00%	0.00%	0.00%	0.00%

Tariff and Price Component	Price	PPM	PPM	PPM	PPM
	(1 July 2021)	Year 2	Year 3	Year 4	Year 5
Inspection charges					
• Water supply Inspections (\$ per hour)	137.96	0.00%	0.00%	0.00%	0.00%
• Additional inspections (\$311.43 for 1 inspection (includes 3 sub-inspections) or \$137.96 per hour)	137.96	0.00%	0.00%	0.00%	0.00%
2.6 Waterway diversion charges - unregulated waterways					
• Licence service fee – all licences (\$ per annum)	276.04	0.00%	0.00%	0.00%	0.00%
• Power generation licences (\$ per kilowatt)	24.79	0.00%	0.00%	0.00%	0.00%
• Volume charges (\$ per ML):					
– All-months licence	36.22	0.00%	0.00%	0.00%	0.00%
– On-stream winter-fill	18.24	0.00%	0.00%	0.00%	0.00%
– Off-stream winter-fill	18.24	0.00%	0.00%	0.00%	0.00%
– Licensed farm dam	18.24	0.00%	0.00%	0.00%	0.00%
– Non-consumptive	2.30	0.00%	0.00%	0.00%	0.00%
– Works operating licences – General (\$ per annum)	62.25	0.00%	0.00%	0.00%	0.00%
– Works operating licences – Hazardous dams (\$ per annum)	105.39	0.00%	0.00%	0.00%	0.00%
2.7 Waterway diversion charges - regulated waterways					
• Licence service fee – all licences (\$ per annum)	276.04	0.00%	0.00%	0.00%	0.00%
• Volume charges (\$ per ML):					
– All-months licence	75.81	0.00%	0.00%	0.00%	0.00%
– Off-stream winter-fill	18.24	0.00%	0.00%	0.00%	0.00%

Tariff and Price Component	Price	PPM	PPM	PPM	PPM
	(1 July 2021)	Year 2	Year 3	Year 4	Year 5
2.8 Stormwater harvesting charges					
• Licence service fee	276.04	0.00%	0.00%	0.00%	0.00%
• Volume charge (\$ per ML) - All-months licence	36.22	0.00%	0.00%	0.00%	0.00%
2.9 Application fees					
• Transfer – Sale of Land	333.86	0.00%	0.00%	0.00%	0.00%
• Amalgamation, subdivision (existing licences)	437.48	0.00%	0.00%	0.00%	0.00%
• Minor Amendment (e.g. add / remove parcel, party or existing entity to existing licence)	126.62	0.00%	0.00%	0.00%	0.00%
• Transfer – Downstream Trade	736.86	0.00%	0.00%	0.00%	0.00%
• Transfer – Upstream Trade	1,088.04	0.00%	0.00%	0.00%	0.00%
• Transfer – Repeat Trade Application	161.16	0.00%	0.00%	0.00%	0.00%
• New Licence - Stormwater	1,093.78	0.00%	0.00%	0.00%	0.00%
• New Licence – Non consumptive / Power Generation	736.86	0.00%	0.00%	0.00%	0.00%
• Additional Charge Where Irrigation and Drainage Plan required	287.80	0.00%	0.00%	0.00%	0.00%
• Works Licence – Amendment (e.g. Pump replacement)	391.44	0.00%	0.00%	0.00%	0.00%
• New Works Construction Licence – Dam / Stormwater	834.74	0.00%	0.00%	0.00%	0.00%
• New Works Construction Licence – Pump Only	656.24	0.00%	0.00%	0.00%	0.00%
• Re-issue – Failure to renew – Domestic and Stock (D&S)	189.93	0.00%	0.00%	0.00%	0.00%
• Re-issue – Failure to renew (all licences)	287.80	0.00%	0.00%	0.00%	0.00%
• Reissue – Following Revocation	1,519.78	0.00%	0.00%	0.00%	0.00%

Tariff and Price Component	Price (1 July 2021)	PPM Year 2	PPM Year 3	PPM Year 4	PPM Year 5
• Copy of Record	57.54	0.00%	0.00%	0.00%	0.00%
• Domestic and Stock (D&S) Dam Registration	103.58	0.00%	0.00%	0.00%	0.00%
• Application to Renew	333.86	0.00%	0.00%	0.00%	0.00%
• Land Information Statement	115.09	0.00%	0.00%	0.00%	0.00%

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 **Melbourne 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 **Melbourne 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 **Melbourne Water's** charges.

Schedule 3 – Application principles to apply to prices

3.1 Waterways and drainage charges

Waterways and drainage charges are applied to serviced properties (as defined in the *Water Act 1989*) located within **Melbourne Water's** Waterway Management District.

Residential properties located within the Urban Growth Boundary are charged a single service charge in respect of each separate occupancy, as defined in the *Local Government Act 1989*.

A 'residential property' includes:

- a property used or intended to be used primarily as a residence or residences
- in the case of vacant land, land zoned for residential purposes.

Non-residential properties located within the Urban Growth Boundary and major airports are charged based on 1990 property values (or its equivalent in dollar terms), subject to a minimum, except those included under tariff 2.1, Schedule 2. The relevant property value is Net Annual Value (NAV), as determined for the purposes of the *Local Government Act 1989*, multiplied by the valuation equalisation factor applying to the area in which the property is located. The valuation equalisation factor is determined by the Valuer General and represents the level of value prevailing in property areas as at 30 June 1990.

In the extended areas, which refers to parts of the Westernport, Werribee and Maribyrnong catchments that were included in **Melbourne Water's** Waterway Management District by Order-in-Council on 18 November 2005, the minimum fee will be applied to all non-residential properties in respect of each separate occupancy, as defined in the *Local Government Act 1989*, and included under tariff 2.2, Schedule 2. The minimum fee also applies to non-residential properties located in the Urban Growth Boundary as a result of extensions to the boundary post 2006, and any non-residential farm land properties which held an exemption as at 30 June 2013.

A minimum fee reflecting only waterway management costs will be applied to properties located outside the Urban Growth Boundary except major airports and those included under tariff 2.4, Schedule 2.

Properties located within the Koo Wee Rup – Longwarry Flood Protection District, which forms part of the former Dandenong Valley and Western Port Authority as at 5 November 1991, which up to 1997, were subject to a special drainage and river improvement rate, pay a fee per serviced property based on calculation of a 10 year transition from a rate based on 1990 property values (the relevant property value is NAV as at 30 June 1990) to a flat rate, with an adjustment factor for large properties to avoid revenue under recovery during the early years of the transition.

3.2 Miscellaneous fees and charges

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

Miscellaneous service	Definition
Property information statements	provided consistent with section 158 of the <i>Water Act</i> 1989.
Provision of flood level information	provision of a flood level certificate in PDF format within 10 days of receiving a request under sections 212 and 264 of the <i>Water Act</i> 1989.
Provision of hydrological data	provision of stream flow, levels, storm intensity and rainfall data in hardcopy or digital format within 10 days of receiving a request.
Application fee for construction over or near <i>Melbourne Water</i> easements or assets	cost of processing development proposals that involve construction over or near <i>Melbourne Water</i> easements or assets.
Storm water connections/ third-party works	<i>Melbourne Water</i> requires all new stormwater connections to be made to the local council system. Where this is not possible a stormwater connection application must be made to <i>Melbourne Water</i> under section 145 of the <i>Water Act</i> 1989. Third-party works include construction of shared paths, pedestrian and road crossings, utility crossings and other type of works that may affect <i>Melbourne Water</i> assets/property.
Inspection charges	Hourly fees apply for water supply connections to recover the costs of inspectors' time on site and repeated visits for complicated construction works.
Flood feasibility study	<i>Melbourne Water's</i> assistance in determining the most appropriate drainage works that would be required to service a development.

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 **Melbourne 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 **Melbourne Water** or pursuant to other government policies that apply to **Melbourne 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 Developer charges, drainage schemes

Consistent with principles for defining a drainage scheme agreed with the development industry, **developer charges** will be calculated by:

- identifying future capital expenditure for each year of the expected life of the scheme;
- identifying forecast developable hectares for each year using an estimate of development density for greenfield schemes and forecast developable floor area for urban renewal precincts;
- applying a pre-tax real discount rate (consistent with the pre-tax discount rate applicable to that **regulatory year**) to convert future cash flows into present value terms;
- setting the **developer charge** such that the present value of future income equals the present value of future costs, where future income is equal to the developable hectares/floor area in each year multiplied by the **developer charge**;
- reviewing the financial assumptions relating to each active scheme on an annual basis and undertaking an engineering review where required (which leads to renewed financials).

4.4 Developer charges, stormwater quality

- The stormwater quality charges comprise a Scheme Stormwater Quality Charge and a General Stormwater Quality Charge and reflect the nitrogen discharged by the scheme relative to the minimum standard.
- The Scheme Stormwater Quality Charge is scheme-specific and recovers the cost of scheme-related stormwater quality initiatives.
- The General Stormwater Quality Charge is equal to the average cost for stormwater management as identified by **Melbourne Water's** regional stormwater quality improvement program.
- Both charges are applied to the mass of nitrogen discharged, relative to the required minimum standard.
- Where a development does not meet the minimum standard, stormwater quality charges will apply. Where on-site stormwater treatment is undertaken, the developer will receive an offset of up to the full amount of their Stormwater Quality Charges.

- Charges for Greenfield Schemes will be based on on-site works undertaken by the developer, the General Stormwater Quality Charge and Scheme Stormwater Quality Charges.
- Charges for non-scheme area developments will be based on on-site works and the General Stormwater Quality Charge.

4.5 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.

4.6 Guidelines

Melbourne 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 the Victorian Desalination Plant and 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, 1.10, 2.1, 2.2 and 2.3 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**.

Melbourne 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 (Desalination water order)	Condition B (Desalination contract cost change)	Condition C (Annual RRR* update)
1.1 Storage operator and bulk water service charges Greater Yarra System – Thomson River			X
1.2 Storage operator and bulk water service charges Victorian Desalination Project		X	X
1.3 Victorian Desalination Plant water order	X		
1.4 Storage operator and bulk water service charges North South Pipeline			X
1.10 Bulk sewerage service charge ¹			X
2.1 Residential waterways and drainage charge			X
2.2 Non-residential minimum charge			X
2.3 Waterways and Drainage Rural charge			X

* RRR is the regulatory rate of return

Condition A – Water order – Desalination plant

Condition A will apply when the water order volume in any **regulatory year** 't', t-1' or 't-2' differs from a water order of 0GL. In this case, the water order price will be adjusted in accordance with formula 6 in Schedule 5B, accounting for the desalination water order (DWO) costs invoiced to Melbourne Water by the Department of Environment, Land, Water and Planning and actual costs associated with moving water through the system to accommodate an order of desalinated water in previous years. Condition A does not apply to pumping costs associated with water orders executed during the 2016-2021 regulatory period.

¹ Adjustments to the sewerage fixed price is according to the retailers' cost share as outlined in Table 3 of Annexure A.

Schedule 5 – Adjustment for costs associated with the Victorian Desalination Plant and annual updates to the RRR

Condition B – Contract costs – Desalination plant

Condition B will apply when the contract costs for the Victorian Desalination Plant in any **regulatory year** 't' differ from the contract cost schedule in that year as per Table 11 in Annexure A. The change in costs will be calculated in accordance with formula 1.

The adjusted contract cost determined in formula 1 will be used to calculate the Victorian Desalination headworks price as outlined in Schedule 5A.

Formula 1: Desalination contract cost changes

$$DCC_t^{adj} = \left(DCC_t^{for} - DCC_{t,base}^{det} \times \frac{CPI_t}{CPI_{base}} \right) + \left(DCC_{t-1}^{act} - DCC_{t-1}^{for} \right) \times \frac{CPI_t}{CPI_{t-1}} \times (1 + RRR_{t-1}^{act})$$

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 2015 equal to 106.8
DCC_t^{adj}	is the total change in desalination contract costs
DCC_t^{for}	Is the forecast desalination contract costs in year t. This will be in real\$ in year t.
$DCC_{t,base}^{det}$	is the desalination contract cost allowed for in the revenue requirement for year t as per Table 11 in Annexure A
DCC_{t-1}^{act}	is the actual desalination contract costs in year (t-1). This will be in real\$ year (t-1).
RRR_{t-1}^{act}	is the real post tax 'vanilla' regulatory rate of return in year (t-1) as per formula 5

Formula 1 calculates the total contract cost changes in two components as **Melbourne Water** may be advised of a change in contract costs prior to and after the commencement of the financial year.

The first component determines total changes in contract costs - allows for updates in forecast desalination contract costs in year t from amounts set in the revenue requirement adjusted for CPI as per Table 11 of Annexure A.

Schedule 5 – Adjustment for costs associated with the Victorian Desalination Plant and annual updates to the RRR

The second component determines total changes in contract costs - is an adjustment for changes in the contract costs between the forecast and actual from the previous year (t-1). These will be adjusted for one year of CPI and the RRR as it is a carry forward amount.

Condition C – Annual regulatory rate of return update

Condition C will apply when the actual RRR in any **regulatory year** 't' differs from the forecast RRR, as per Table 13 of Annexure A, in that year. The actual RRR is calculated as per formula 5.

The difference in the forecast and actual RRR in any **regulatory year** 't' is multiplied by the average of the regulatory asset base (RAB) - $\frac{RAB_t + RAB_{t-1}}{2}$ - to determine the change in **Melbourne Water's** total expected return. The RAB is set out in Table 7 of Annexure A.

The change between forecast and actual RRR will be apportioned across the tariffs listed in Schedule 5A.

Formula 2 to 5 outlines the process required to determine the actual RRR in any given year.

Formula 2: Determining return on equity

$$RoE^{real} = 4.2 \text{ per cent}$$

Formula 3: Determining cost of debt

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

$CoD_i^{nominal}$

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 12 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 year t (e.g. 1 April 2020 to 31 March 2021 in relation to 2021-22)

Formula 4: Determining the Nominal RRR (regulatory rate of return)

$$RRR_t^{nominal} = RoE^{nominal} \times (1 - gearing) + CoD_t^{nominal} \times gearing$$

$RRR_t^{nominal}$	is the post-tax 'vanilla' RRR in nominal terms for regulatory year 't'
$RoE^{nominal}$	is the total cost of equity in nominal terms for all regulatory years
$CoD_t^{nominal}$	is the total cost of debt in nominal terms for regulatory year 't'
<i>Gearing</i>	is equal to 60%

Formula 5: Determining the actual real RRR (regulatory rate of return)

$$RRR_t^{act} = \frac{(1 + RRR_t^{nominal})}{(1 + \pi_{RRR})} - 1$$

RRR_t^{act}	is the post-tax 'vanilla' RRR in real terms for year t rounded to 1 decimal place, i.e. 4.34% is rounded to 4.3%
$RRR_t^{nominal}$	is the post-tax 'vanilla' RRR in nominal terms for regulatory year 't'
π_{RRR}	is the inflation factor which is equal to 2.2% for all regulatory years

Formula 5 outlines the process for converting the post-tax 'vanilla' RRR from nominal to real using the Fisher equation.

Schedule 5B – Prices

Formula 6: Desalination water order cost adjustment

$$P(VDP\ order)_{j,t} = \{DWO_t + \left(\frac{CPI_t}{CPI_{t-1}}\right) \times DWOM_{t-1}^1 + \left(\frac{CPI_t}{CPI_{t-2}}\right) \times DWOMC_{t-2}^2\} \times Percentage_{j,t}^{DWO}$$

$P(VDP\ order)_{j,t}$	is the desalination water order costs allocated to retail water business j in year t
DWO_t	is the desalination water order costs invoiced to Melbourne Water by the Department of Environment, Land, Water and Planning

Schedule 5 – Adjustment for costs associated with the Victorian Desalination Plant and annual updates to the RRR

$DWOM_{t-1}^1$	is the actual desalination water management costs incurred by Melbourne Water in the first nine months of executing the desalination water order in year t-1.
$DWOM_{t-2}^2$	is the actual desalination water management costs incurred by Melbourne Water in the remaining three months of executing the desalination water order in year t-2
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
$Percentage_{j,t}^{DWO}$	is the percentage of desalination water order costs allocated to retailer j, which is as defined by retailers or if not as listed in Table 1 of Annexure A

Formula 6 outlines the process for calculating the Victorian Desalination Project water order price. This price only applies when a desalination water order occurs, and/or when Melbourne Water has incurred pumping costs in moving desalination water through the system (to accommodate an order of desalinated water) in the prior years.

Formula 7: Regulatory rate of return price adjustment

$$P_t = P_{t-1} \times \frac{CPI_t}{CPI_{t-1}} \times (1 + PPM_t) + (RRR_t^{act} - RRR_t^{for}) \times RAB_t \times \frac{CPI_t}{CPI_{base}}$$

P_t	is the price component for 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 2015 equal to 106.8
PPM_t	is the prescribed price movement for the price component for regulatory year 't' determined in accordance with Schedule 2
RRR_t^{act}	is the actual calculated real post tax 'vanilla' regulatory rate of return for year t as per formula 5

Schedule 5 – Adjustment for costs associated with the Victorian Desalination Plant and annual updates to the RRR

RRR_t^{for}	is the forecast real post tax 'vanilla' regulatory rate of return as per Table 13 of Annexure A
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RAB_t	is the average RAB - $\frac{RAB_t + RAB_{t-1}}{2}$ - in regulatory year 't'. The RAB is specified in Table 7 of Annexure A
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Formula 7 outlines the process for annually adjusting the prices outlined in Schedule 5A to reflect the new RRR (regulatory rate of return). This is done in two steps. The first step is to update the previous year's price for CPI and the PPM. The second step is to add on the adjustment for the movement in the RRR. This is done by multiplying the change in RRR by the average RAB.

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

Date: 25 June, 2021



A handwritten signature in blue ink, appearing to read "K. Symons", written over a horizontal line.

Kate Symons

Chairperson

Annexure A

Table 1 Victorian Desalination Project delivery entitlement

per year of the 2021-2026 regulatory period

Victorian Desalination Project	Bulk delivery* entitlements (ML)	Retailer share
City West Water	39,595	26.4%
South East Water	53,454	35.6%
Yarra Valley Water	56,951	38.0%
<i>Total</i>	150,000	100.0%

Table 2 Bulk delivery entitlement shares

per year of the 2021-2026 regulatory period

Greater Yarra System – Thomson River	Bulk delivery* entitlements (ML)	Retailer share
City West Water	152,797	24.8%
South East Water	206,281	33.5%
Yarra Valley Water	219,776	35.7%
Western Water	18,250	3.0%
Barwon Water	16,000	2.6%
South Gippsland Water	1,000	0.2%
Westernport Water	1,000	0.2%
<i>Total</i>	615,104	100.0%
North South Pipeline		

* Note bulk delivery entitlements are subject to change pending ministerial advice.

City West Water	25,000	33%
South East Water	25,000	33%
Yarra Valley Water	25,000	33%
<i>Total</i>	75,000	100%
Tarago		
Gippsland Water	4,070	100%

Table 3 Sewerage cost allocation shares
over the 2021-2026 regulatory period

Retailer	Retailer's sewerage cost allocation share
City West Water	20.6%
South East Water	41.9%
Yarra Valley Water	37.4%
<i>Total</i>	100.0%

Table 4 Non-residential waterways and drainage customers

	2021-22	2022-23	2023-24	2024-25	2025-26
Customers on minimum fee	130,511	137,058	143,962	152,710	161,419
Customers above minimum fee	33,863	30,068	25,196	19,854	14,651

Table 5 Benchmark revenue requirement
\$m 2020-21

	2021-22	2022-23	2023-24	2024-25	2025-26
Operating expenditure	946.9	936.1	925.4	913.7	904.7
Return on assets	384.2	401.3	416.3	426.7	434.3
Regulatory depreciation	191.3	212.6	234.5	250.9	265.0

Tax allowance	17.8	18.8	19.2	17.1	18.9
Final decision revenue requirement	1,540.2	1,568.8	1,595.4	1,608.4	1,623.0

Table 6 Updated regulatory asset base

\$m 2020-21

	2016-17	2017-18	2018-19	2019-20	2020-21
Opening RAB at 1 July	10,534.2	10,637.4	10,804.8	11,025.1	11,216.8
<i>Plus</i> Gross capital expenditure	459.0	469.7	563.0	548.5	512.7
<i>Plus</i> Desal payment capitalisation	0.0	32.8	32.8	32.8	32.8
<i>Less</i> Government contributions	0.0	0.0	0.0	0.0	0.0
<i>Less</i> Customer contributions	121.4	147.3	165.6	166.2	183.9
<i>Less</i> Proceeds from disposals	9.3	9.0	13.8	11.1	14.4
<i>Less</i> Regulatory depreciation	225.2	178.8	196.0	212.3	226.0
Closing RAB 30 June	10,637.4	10,804.8	11,025.1	11,216.8	11,337.9

Table 7 Rolled forward regulatory asset base

\$m 2020-21

	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Opening RAB at 1 July	11,337.9	11,419.3	11,868.4	12,453.1	12,776.9	13,083.5
<i>Plus</i> Gross capital expenditure	423.3	748.0	889.5	642.1	634.7	499.7
<i>Plus</i> Desal payment capitalisation	32.8	20.3	29.9	45.2	54.7	62.9
<i>Less</i> Government contributions	0.0	0.0	0.0	0.0	0.0	0.0
<i>Less</i> Customer contributions	121.7	119.3	119.3	124.9	119.8	133.1
<i>Less</i> Proceeds from disposals	14.0	8.5	2.9	3.9	12.1	7.3
<i>Less</i> Regulatory depreciation	239.0	191.3	212.6	234.5	250.9	265.0
Closing RAB at 30 June	11,419.3	11,868.4	12,453.1	12,776.9	13,083.5	13,240.6

Table 8 Approved licence fee and environmental contribution assumptions

\$m 2020-21

	2021-22	2022-23	2023-24	2024-25	2025-26
Essential Services Commission licence fee	1.15	1.15	1.15	1.15	1.72
Department of Health licence fee	0.24	0.24	0.24	0.24	0.24
Environment Protection Authority licence fee	1.34	1.33	1.33	1.33	1.33
Environmental contribution	0.95	0.93	0.91	0.89	0.87

Table 9 Key capital projects and programs

Projects	Scheduled start date*	Expected completion date
WTP Primary Treatment Augmentation	2020-21	2025-2026
WTP 55E Activated Sludge Plant Upgrade	2020-21	2025-2026
Hobson's Bay Main Sewer Yarra Crossing Duplication	2020-21	2027-2028
Maribyrnong Main Sewer Augmentation	2020-21	2023-2024
WTP Gas Plant Renewal	2022-23	2027-2028
Yan Yean to Bald Hill Pipeline	2020-21	2023-2024
Maroondah Res Outlet and Aqueduct Stage 3A	2020-21	2027-2028
Winneke Treatment Plant - UV Disinfection System	2020-21	2024-2025
Olinda to Mitcham Water Mains Replacement Stage 1	2020-21	2022-2023
Mt Atkinson Reservoir Inlet Pipeline	2021-22	2023-2024
Port Melb Pump Station Renewal	2021-22	2022-2023
Shogaki Drive DSS Interim Outfall Works	2022-23	2022-2023

EPT = Eastern Treatment Plant; WTP = Western Treatment Plant; UV – ultraviolet; M&E = mechanical and electrical.

* Note: The start date is the date that Melbourne Water commenced investigations. Some projects have long investigative stages, or have been re-prioritised subsequently.

Wylies Drain Section 3 RBPWL2	2021-22	2022-2023
Trib of Skeleton Creek Upper - Section 1	2022-23	2023-2024
Clyde Creek Section 92 Liliium WL9	2021-22	2022-2023
Programs		
ETP M&E assets renewal program		Ongoing
Water M&E assets renewal program		Ongoing
Catchment management program		Ongoing
Sewerage transfer M&E asset renewal program		Ongoing
Water transfer civils program		Ongoing
WTP civils renewal program		Ongoing
Sewerage transfer civils renewal program		Ongoing
Water production and storage civils program		Ongoing
Odour and corrosions program		Ongoing
ETP civils renewal program		Ongoing
WTP M&E renewal program		Ongoing
Drainage and Flood Protection program		Ongoing
Land Development program		Ongoing
Stormwater Quality program		Ongoing
Waterways Condition program		Ongoing

Table 10 Prescribed operating expenditure

\$m 2020-21

	2021-22	2022-23	2023-24	2024-25	2025-26
Prescribed operating expenditure excluding desalination costs	419.3	416.3	417.8	422.1	426.3
Desalination security payments	547.9	549.7	552.7	546.3	541.3
Less capitalisation	-20.3	-29.9	-45.2	-54.7	-62.9

Desalination water order	-	-	-	-	-
Total prescribed operating expenditure	946.9	936.1	925.4	913.7	904.7

Table 11 Desalination security payments

\$m 2020-21

	2021-22	2022-23	2023-24	2024-25	2025-26
Desalination security payments	547.9	549.7	552.7	546.3	541.3

Table 12 Historical cost of debt (nominal)

Per cent

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Cost of debt	6.3%	5.3%	7.1%	5.4%	5.3%	4.9%	4.5%	4.6%	3.3%	3.0%

Table 13 Forecast real and nominal post-tax regulatory rate of return (RRR)

Per cent

	2021-22	2022-23	2023-24	2024-25	2025-26
Nominal Post Tax RRR	5.6%	To be determined based on Formula 7			
Inflation	2.2%	2.2%	2.2%	2.2%	2.2%
Real Post Tax RRR	3.3%	To be determined based on Formula 5			