

# EXECUTIVE SUMMARY

This Final Report presents the outcomes of the independent Tasmanian Economic Regulator's (Economic Regulator) price determination investigation. In its preparation, the Economic Regulator has considered the proposed Price and Service Plan (PSP) submitted by the Tasmanian Water and Sewerage Corporation Pty Ltd (TasWater) on 30 June 2017, expert advice from independent consultants and feedback received from the public and other stakeholders during consultation on the Economic Regulator's Draft Report.

TasWater is a monopoly service provider of essential services and, under the *Water and Sewerage Industry Act 2008* (Industry Act), the Economic Regulator is responsible for the independent regulation of TasWater's water and sewerage services. The Economic Regulator regulates prices based on the pricing principles set out in the Industry Act and proposed price and service plans submitted by TasWater. The Tasmanian water and sewerage industry has been subject to independent economic regulation since 1 July 2012.

The decisions made by the Economic Regulator in this Final Report and Determination apply from 1 July 2018 to 30 June 2021 inclusive (the third regulatory period).

The water and sewerage industry is critical to public health, environmental health and economic development potential across Tasmania. TasWater owns, controls and operates water supply and sewerage systems in Tasmania. It manages all aspects of the water supply chain from dams and reservoirs to customer property connections and from customer sewer connections to wastewater treatment and disposal. As the primary provider of water and sewerage services in Tasmania, TasWater is also subject to various public health, environmental and customer service regulatory requirements.

The Tasmanian Water and Sewerage regulatory framework provides for the Economic Regulator to conduct periodic price determination investigations, for Draft and Final Reports to be released and for a price determination to be made as part of the investigation.

The purpose of a price determination investigation is to gather information to enable the Economic Regulator to make a price determination for regulated water and sewerage services provided by TasWater. The Price Determination specifies the method for determining the maximum prices that TasWater can charge for the supply of regulated water and sewerage services for each financial year of the third regulatory period.

The Economic Regulator aims to set prices for TasWater's services that will provide it with sufficient revenue to fund its proposed expenditure to meet its health, environmental and dam safety compliance obligations while keeping price increases to a minimum and maintaining its financial sustainability.

## Revenue and prices

The maximum allowed regulated revenue (MARR) caps the amount of revenue that TasWater can earn which, in turn, determines TasWater's prices. The Economic Regulator has set the MARR at \$1.071 billion for the third regulatory period and has capped price increases at 4.6 per cent per annum. TasWater's initial calculation of its MARR of \$1.225 billion indicated a potential 7.9 per cent annual price increase. However, based on customer feedback, TasWater proposed annual price increases of 4.6 per cent.

In its Draft Report, the Economic Regulator calculated a MARR, which would have resulted in annual price increases, for tariffs, of 4.16 per cent. Based on submissions received through the consultation

process, independent expert advice, feedback from industry regulators and its own analysis, the Economic Regulator has recalculated TasWater's MARR for this Final Report.

The final MARR calculated by the Economic Regulator is approximately \$155 million lower, over the third regulatory period, than that proposed by TasWater mainly due to the Economic Regulator approving lower rates of return on capital, tax allowances and regulatory depreciation. However, the Economic Regulator's final MARR for the third regulatory period represents an increase of \$172 million over the MARR of \$899 million approved for the second regulatory period.

The Economic Regulator's Final Report has also accounted for an error in TasWater's pricing model relating to the number of water connections. This error had been present in TasWater's proposed PSP and also in the Economic Regulator's Draft Report. While there is still some uncertainty surrounding the actual number of water connections, the numbers in TasWater's pricing model were not consistent with numbers relied upon elsewhere and in past investigations.

This adjustment, along with the other changes made to the Draft Report, would have resulted in indicative annual price increases of, potentially, around eight per cent. As noted above, price increases of this magnitude would exceed customer expectations. The Economic Regulator has, therefore, decided to cap annual price increases at 4.6 per cent, which is consistent with what TasWater put forward in its proposed PSP.

These annual price increases will apply for fixed water, fixed sewerage and variable water charges and, for a residential customer using 200 kL of water per annum, will mean annual bill increases of around \$56.

Table 1 shows the water and sewerage prices approved by the Economic Regulator for residential customers and the estimated change in annual bills for the third regulatory period based on usage of 200 kL of water per annum.

Table 1 Economic Regulator's approved prices for residential customers (\$)

	2017-18	2018-19	2019-20	2020-21
Water Fixed (20mm)	329.48	344.64	360.49	377.07
Water Variable (\$/kL)	1.02	1.0671	1.1162	1.1675
Sewerage	632.24	661.32	691.74	723.56
Annual Bill (200 kL)	1 165.76	1 219.38	1 275.47	1 334.13
Change		53.38	56.09	58.66

TasWater has been working to transition those customers currently paying below target tariffs for their water and/or sewerage services to the relevant target tariffs. TasWater notes in its proposed PSP that there will be approximately 7 500 customers still paying below target tariffs at the beginning of the third regulatory period. The legislation requires TasWater to complete the transition of all customers to target tariffs by 1 July 2020.

To achieve this outcome, the Economic Regulator accepts TasWater's proposed price transition arrangements:

- Customers within \$50 of fixed target tariffs will move straight to the relevant target tariff in 2018-19.
- Customers more than \$50 from fixed target tariffs will see annual increases of one third of the difference between the target tariffs in 2020-21 and the prices they are paying as at 30 June 2018.

In both cases, the \$50 cap increases in proportion to the size of the water connection and the estimated demand placed on the sewerage system.

Table 2 summarises the adjustments the Economic Regulator has made to TasWater's MARR for the third regulatory period.

Table 2 Summary of Economic Regulator's adjustments to TasWater's MARR for the third regulatory period (\$000's)

	TasWater's proposed PSP	Economic Regulator's Final Report	Change from TasWater's proposed PSP
Opex	538 732	524 167	- 14 565
Regulatory depreciation	344 732	284 655	- 60 077
Return on capital	494 781	448 203	- 46 578
Inflationary gain	-228 419	- 221 216	7 203
Tax allowance	70 489	34 925	- 35 564
Working capital	4 867	0	- 4 867
MARR	1 225 185	1 070 734	- 154 451

A summary of the impact of the Economic Regulator's decisions from this Final Report on TasWater's MARR is included below in the Overview. Chapter 11 details the Economic Regulator's calculation of TasWater's MARR for the third regulatory period. Chapters 12 and 13 discuss the structure and basis of TasWater's proposed water and sewerage prices and price transition arrangements together with the Economic Regulator's assessment of customer impacts.

## Regulatory compliance

One of the key goals of TasWater's proposed PSP for the third regulatory period is to improve its levels of compliance with its regulatory obligations.

Broader regulatory compliance improvement and enforcement across the water and sewerage industry remains the responsibility of the Tasmanian industry regulators, namely the Environment Protection Authority (EPA), Director of Public Health and the Secretary of the Department of Primary Industries, Parks, Water and Environment (DPIPWE), who is the Delegate for Dam Safety Regulation.

The Economic Regulator consulted with the other Tasmanian industry regulators to ensure TasWater's proposed PSP met their expectations and reflected the compliance improvement outcomes agreed to between TasWater and industry regulators for the third regulatory period.

Chapter 3 of this Report provides more detail on regulatory compliance improvement.

## Customer service

The Economic Regulator reviewed TasWater's proposed minimum customer service standards for the third regulatory period. TasWater proposed meeting, rather than exceeding, these standards while improving water quality, dam safety and environmental compliance outcomes and not putting any further upward pressure on expenditure and, therefore, prices.

The Economic Regulator considers that, subject to minor amendment, TasWater's proposed minimum customer service standards satisfy the requirements of the Tasmanian Water and Sewerage Industry Customer Service Code (the Code).

TasWater's proposed PSP for the third regulatory period also included a draft customer contract and draft policies in relation to its proposed pricing for particular water and sewerage services, together with policies governing its interactions with customers. The policies deal with issues such as:

- imposing developer charges;
- extending water and sewerage infrastructure;
- introducing new services;
- connecting customers to water and sewerage infrastructure;
- sub-metering arrangements; and
- charges in relation to unconnected properties.

The Economic Regulator reviewed the content of the policies proposed by TasWater and requested that TasWater make a number of changes to ensure that these documents, and the customer contract, are satisfactory and comply with the relevant regulatory and legislative provisions.

Chapter 4 of this Report provides a detailed discussion of TasWater's proposed policies, customer contract and customer service standards. The customer contract and policies are attached as appendices to this Report.

## Building block approach

As it did for the first and second regulatory periods, the Economic Regulator has used a building block approach in calculating TasWater's MARR for the third regulatory period. The building block approach takes into account the costs involved in providing regulated services.

Building blocks, include:

- operating and maintenance expenditure (opex);
- regulatory depreciation (return of capital); and
- cost of capital (return on capital).

Other key inputs that the Economic Regulator has used in calculating TasWater's MARR are:

- capital expenditure (capex); and
- regulated asset base (RAB).

## Capital and operating expenditure

To assist with its investigation and to ensure TasWater's MARR is based on efficient costs, the Economic Regulator engaged an external consultant, Arup Pty Ltd (Arup), to conduct an independent review of TasWater's capex and opex. Copies of Arup's Draft and Final Reports are available on the Economic Regulator's website: [www.economicregulator.tas.gov.au](http://www.economicregulator.tas.gov.au)

Based on Arup's review, and its own analysis of TasWater's opex and capex, the Economic Regulator identified several areas in which it requires TasWater to reduce its proposed capex and opex for the third regulatory period, including:

- facilities, fleet and plant renewals capex;

- salaries opex;
- materials and services opex;
- chemicals opex; and
- fleet opex.

The Economic Regulator also requires TasWater to achieve additional productivity savings on its proposed opex for the third regulatory period.

The Economic Regulator sought stakeholder feedback on changing the timing of the recognition of TasWater's capex in its RAB from when construction commences to when the asset is fully operational. The Economic Regulator proposed this change with the objective of incentivising TasWater to deliver its agreed capex projects on time and on budget.

Stakeholders supported the Economic Regulator's proposal and its objectives. However, after further consideration of the incentive it provided, the Economic Regulator modified the arrangement so that TasWater continues to be able to add capex to its RAB as it is incurred but is unable to receive a regulatory depreciation allowance on that expenditure until such time as the asset is commissioned.

The Economic Regulator notes that TasWater has made significant improvements in its capex planning and prioritisation for the third regulatory period. However, the Economic Regulator, industry regulators, Arup and the Tasmanian Audit Office (TAO) have identified a need for TasWater to set out more clearly its plans to achieve full regulatory compliance and operational efficiencies to avoid investing in stranded assets. Such a plan is considered the next logical step in TasWater's asset management and capex planning.

The changes to TasWater's opex and capex, as required by the Economic Regulator, are set out in Table 3.

Table 3 Opex and Capex for the third regulatory period (\$000's)

	TasWater's proposed PSP	Economic Regulator's Final Report	Change from TasWater's proposed PSP
Capex	466 616	465 136	- 1 480
Opex	538 732	524 167	- 14 565

Chapters 6 and 7 of this Report outline, in more detail, the Economic Regulator's analysis and decisions on TasWater's capex and opex for the third regulatory period.

## Regulatory depreciation

TasWater proposed adopting a line-by-line approach to calculating the regulatory depreciation rates on all of its assets, including both New and Existing assets, for the third regulatory period. During the second regulatory period, the Economic Regulator applied a value weighted average approach to regulatory depreciation, and calculated regulatory depreciation rates for each of TasWater's asset categories after determining their useful lives.

The Economic Regulator will continue using a weighted average approach to calculating regulatory depreciation for TasWater's Existing Assets, but will use a line-by-line approach to calculate the regulatory depreciation on TasWater's New Assets. Table 4 details the Economic Regulator's decisions on regulatory depreciation.

Table 4 Regulatory depreciation for the third regulatory period (\$000's)

	TasWater's proposed PSP	Economic Regulator's Final Report	Change from TasWater's proposed PSP
Regulatory depreciation	344 732	284 655	- 60 077

Chapter 8 provides more detail on regulatory depreciation.

## Weighted Average Cost of Capital (WACC) and Return on Capital

In addition to reducing TasWater's capex, opex and regulatory depreciation, the Economic Regulator decided on lower WACCs for both New and Existing assets (see Chapter 9) than those proposed by TasWater. Table 5 compares TasWater's proposed WACC components to those decided by the Economic Regulator, along with the resultant WACC values. Applying the Economic Regulator's WACCs to its calculation of TasWater's RAB will also lead to a lower return on capital for the third regulatory period, as explained in Chapter 10.

Table 5 TasWater's proposed and Economic Regulator's decisions on WACC components and values

	TasWater's proposed PSP	Economic Regulator's Final Report	Change from TasWater's proposed PSP
Statutory return on equity (Existing)	3.00%	3.00%	
Gearing	60%	60%	
Risk free rate	3.50%	2.88%	-0.62%
Debt risk premium	2.49%	1.98%	-0.51%
Debt issuance	0.10%	0.10%	
Market risk premium	6.50%	6.50%	
Equity beta	0.70	0.65	-0.05
Gamma	0	0.40	0.40
Cost of debt (pre-tax)	6.09%	4.96%	-1.13%
Cost of equity <sub>(New)</sub> (post-tax)	8.05%	7.10%	-0.55%
WACC <sub>EXISTING</sub>	4.49%	3.96%	-0.53%
WACC <sub>NEW</sub>	6.87%	5.82%	-1.05%

## Next steps

Following release of this Final Report and Price Determination, TasWater is required to submit its revised PSP for the Economic Regulator's approval. The revised PSP must comply with the requirements set out in the Economic Regulator's Final Report and Price Determination.

Subject to the Economic Regulator's approval, the prices and service standards outlined in TasWater's final PSP commence on 1 July 2018.