

2 REVENUE REQUIREMENT

The prices for regulated water and sewerage services in Tasmania are determined by applying forecast demand for regulated services to an annual notional revenue such that the regulated prices when multiplied by the forecast annual demand are no greater than the notional revenue. This revenue, referred to as TasWater's Notional Allowable Revenue (NAR), is used only to determine the maximum prices TasWater can charge for regulated services.⁴

2.1 Regulator's draft decisions

The Regulator has made the following draft decisions:

1. Accept TasWater's proposed opening RAB as set out in Table 2.1;
2. Apply the proposed RAB roll forward as set out in Table 2.3;
3. Apply the inflation adjustment as set out in Table 2.3;
4. Subject to TasWater providing further evidence to support the value for the disposal of the Macquarie Point STP in 2024-25, accept TasWater's values of asset disposals as set out in Table 2.3;
5. Accept TasWater's proposed third party contributions as set out in Table 2.3;
6. Apply the regulatory depreciation allowances as set out in Chapter 6 and Table 2.3;
7. Apply the capex allowances as set out in Chapter 4 and Table 2.3;
8. Apply the NAR for each year as set out in Table 2.9.

2.2 Determining the NAR

The NAR is determined using a 'building block' approach. Under the building block approach, the regulated entity is allowed to recover through regulated prices the efficient costs of all the activities required to provide water and sewerage services to customers, including funding-related costs.

The cost components, or building blocks, are:

- operating expenditure (opex) (Chapter 5);
- return of capital (regulatory depreciation) (Chapter 6);
- tax allowance (Section 2.5);
- inflation offset (Section 2.3); and
- return on capital (Section 2.4).

The key inputs used in calculating the building blocks are:

⁴ In practice, TasWater's actual revenue will most likely be different as the actual number of customers and volume of water supplied in each year will differ from the forecasts depending on factors such as the weather and the level of demand from major industrial customers.

- capital expenditure (capex) (Chapter 4);
- the values of the Regulatory Asset Base (RAB) (Section 2.3); and
- the Weighted Average Cost of Capital (WACC) (Chapter 7).

The sum of the cost components is an estimate of TasWater's annual revenue for each year of the regulatory period based on a range of assumptions such as the number of customers and the volume of water supplied. The forecast demand for regulated services is discussed in Chapter 3.

In assessing TasWater's proposed prices, the Regulator assesses TasWater's proposed prices by reference to the Notional Allowable Revenue (NAR).

This chapter discusses the components of the NAR not addressed in other chapters and presents the Regulator's draft decision on TasWater's NAR.

2.3 Regulatory Asset Base

The Regulatory Asset Base (RAB) is the value of the assets required to provide regulated services. The RAB is used to calculate the return on capital and the return of capital (regulatory depreciation).

As required under Section 68(1A) of the Industry Act, assets must also be split between assets transferred to the previous regulated entities before 1 July 2011 (referred to as existing assets) and assets purchased or constructed by the previous regulated entities and subsequently TasWater on or after 1 July 2009 (referred to as new assets) TasWater must split its assets between existing assets and new assets.

TasWater is also required to have separate RABs for water and sewerage assets to enable the Regulator to ensure that the revenue from the provision of each regulated service recovers only the costs associated with providing that service. TasWater must therefore maintain four RABs; existing water, existing sewerage, new water and new sewerage.

Each RAB must be rolled forward for each year of the regulatory period.

As set out in the Regulator's PSP Guideline, to determine the applicable opening RABs for the fourth regulatory period (ie as at 1 July 2022), the closing RAB from the second year of the penultimate regulatory period (the RABs as at 30 June 2017) is rolled forward to 30 June 2022.

The opening RAB for existing assets as at 1 July 2022 is then rolled forward for each year of the fourth regulatory period by:

Adding

- inflation adjustment

Subtracting

- asset disposals
- third party contributions
- regulatory depreciation.

The opening RAB for new assets as at 1 July 2022 is then rolled forward for each year of the fourth regulatory period by:

Adding

- capex
- inflation adjustment

Subtracting

- asset disposals
- third party contributions
- regulatory depreciation.

Opening RABs

TasWater's proposed Opening RABs, as provided in its Financial Model, are set out in the following table.

Table 2.1 TasWater's Opening RABs (\$)

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Water – existing	1,231,575,895	1,225,744,089	1,213,732,036	1,200,691,813	1,187,437,506	1,177,769,390	1,168,533,975	1,164,485,515
Water – new	502,407,768	579,766,559	637,547,782	731,137,435	867,841,337	1,002,106,024	1,098,124,681	1,194,225,841
Sewerage – existing	1,079,522,259	1,076,112,538	1,066,835,925	1,057,006,847	1,045,818,430	1,037,241,488	1,031,330,249	1,016,806,393
Sewerage - new	369,119,525	414,692,682	466,454,844	508,774,568	551,689,207	636,143,467	751,165,907	844,584,369
Total	3,182,625,448	3,296,315,869	3,384,570,588	3,497,610,663	3,652,786,480	3,853,260,369	4,049,154,812	4,220,102,118

RAB roll forward

TasWater's proposed RAB roll forward is provided in Table 2.2.

Table 2.2 TasWater's RAB roll forward (\$)

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Opening RAB	3,182,625,448	3,296,315,869	3,384,570,588	3,497,610,663	3,652,786,480	3,853,260,369	4,049,154,812	4,220,102,118
Capex	129,386,000	128,800,000	174,924,230	229,843,489	285,497,516	299,341,915	226,703,355	223,919,527
Disposals	5,097,992	6,157,935	6,843,329	546,605	62,616	2,904,908	11,519,132	3,349,652
Depreciation – existing	53,844,396	53,376,110	52,902,498	52,125,116	51,682,706	51,414,479	51,288,645	50,880,768
Depreciation – new	23,180,317	33,610,731	44,149,557	47,826,085	51,077,941	57,413,818	63,947,924	73,940,223
Third party contributions	408,008	141,559	12,141,900	17,890,000	36,992,160	59,146,324	9,983,443	30,122,748
Inflation adjustment	66,835,134	52,741,054	54,153,129	43,720,133	54,791,797	67,432,056	80,983,096	94,952,298
Inflation	2.10%	1.60%	1.60%	1.25%	1.50%	1.75%	2.00%	2.25%
Closing RAB	3,296,315,869	3,384,570,588	3,497,610,663	3,652,786,480	3,853,260,369	4,049,154,812	4,220,102,118	4,380,680,551

Disposals

Disposals are assets which are no longer used in providing regulated services and are sold or otherwise disposed of. The Regulator intends accepting TasWater's disposals values subject to TasWater providing further evidence to support the \$11 million disposal value for the Macquarie Point STP in 2024-25.

Third party contributions

Third party capital contributions are assets contributed by third parties and include developer charges, gifted assets, service introduction charges and government grants. Third party capital

contributions may be included in capex but are not in the RABs and are therefore not considered when determining prices because TasWater is not permitted to receive a return on capital, or a return of capital, in relation to assets it did not fund itself.

Third party contributions include \$133.5 million external funding over the fourth regulatory period for the Macquarie Point STP relocation project and the Tamar Estuary River Health Action Plan (TERHAP). The Regulator has reviewed and intends accepting TasWater's proposed third party contributions.

Inflation adjustment/offset

The use of a nominal WACC requires the RAB values to be adjusted for inflation. The RAB roll forward included actual inflation where the value is known and forecast inflation for the remaining years. The forecast inflation values used by the Regulator are based on those in Table 5.1 of the RBA's *Statement on Monetary Policy* (November 2021)⁵. The Regulator has used significantly higher forecast inflation rates than TasWater. This has resulted in larger estimates of the value of inflationary gain, which reduces TasWater's return on capital. The Regulator's RAB roll forward is shown in Table 2.3.

Table 2.3 Regulator's RAB roll forward (\$)

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Opening RAB	3,182,625,448	3,280,666,207	3,307,591,723	3,492,295,044	3,699,145,119	3,867,216,558	4,015,406,851	4,196,206,350
Capex	129,386,000	128,800,000	174,924,230	229,843,489	274,248,691	287,761,739	215,435,416	212,925,924
Disposals	5,097,992	6,157,935	6,843,329	546,605	62,616	2,904,908	11,519,132	3,349,652
Depreciation – existing	53,580,931	52,122,260	52,774,608	52,768,839	48,049,000	47,399,000	46,892,000	46,523,000
Depreciation – new	23,180,317	33,610,731	44,149,557	47,826,085	50,717,000	56,644,000	62,770,000	72,254,000
Third party contributions	408,008	141,559	12,141,900	17,890,000	97,513,180	126,884,729	11,328,028	34,170,228
Inflation adjustment	50,922,007	-9,841,999	125,688,485	96,038,114	90,164,545	94,261,190	97,873,243	102,280,128
Inflation	1.60%	-0.30%	3.80%	2.75%	2.44%	2.44%	2.44%	2.44%
Closing RAB	3,280,666,207	3,307,591,723	3,492,295,044	3,699,145,119	3,867,216,558	4,015,406,851	4,196,206,350	4,355,115,521

2.4 Return on capital

The rate of return used to calculate the return on capital in the NAR is the WACCs for new and existing assets. The applicable WACCs are discussed in Chapter 7. The relevant WACC is multiplied by an average of the opening and closing RAB values in each year of the regulatory period.

Tables 2.4 and 2.5 show TasWater's return on capital as set out in its proposed PSP.

Table 2.4 TasWater's proposed return on capital - existing assets (\$)

	2022-23	2023-24	2024-25	2025-26
RAB (average)	2,224,133,406	2,207,437,551	2,190,578,066	2,179,149,388
WACC existing	4.17%	4.17%	4.17%	4.17%
Return on assets	92,745,919	92,049,706	91,346,668	90,870,095

⁵ <https://www.rba.gov.au/publications/smp/2021/nov/economic-outlook.html>

Geometric mean of June 2023 inflation forecast and December 2023 inflation forecast for periods two, three and four of the fourth regulatory period.

Table 2.5 TasWater's proposed return on capital - new assets (\$)

	2022-23	2023-24	2024-25	2025-26
RAB (average)	1,528,890,018	1,743,770,040	1,944,050,400	2,121,241,947
WACC New	5.41%	5.41%	5.41%	5.41%
Return on assets	82,655,312	94,272,220	105,099,837	114,679,220

Noting that inputs into the WACC will be updated for the Regulator's Final Report to reflect prevailing interest rates, tables 2.6 and 2.7 show the Regulator's calculation of TasWater's return on capital.

Table 2.6 Regulator's return on capital - existing assets (\$)

	2022-23	2023-24	2024-25	2025-26
RAB (average)	2,264,343,976	2,270,534,037	2,271,843,594	2,273,628,833
WACC existing	3.63%	3.63%	3.63%	3.63%
Return on assets	82,195,686	82,420,386	82,467,922	82,532,727

Table 2.7 Regulator's return on capital - new assets (\$)

	2022-23	2023-24	2024-25	2025-26
RAB (average)	1,518,836,862	1,670,777,667	1,833,963,006	2,002,032,102
WACC New	4.75%	4.75%	4.75%	4.75%
Return on assets	72,205,504	79,428,770	87,186,601	95,176,606

2.5 Tax Allowance

For the third regulatory period, TasWater proposed, and the Regulator approved, the use of a post-tax WACC. This necessitated the inclusion of a tax allowance in the regulated revenue build-up.

However, following amendments made to the *Water and Sewerage Corporation Act 2012* in 2018, from 1 January 2019 TasWater is no longer subject to the National Tax Equivalent Regime and is therefore no longer required to make tax equivalent payments to its owners.

Consequently, for the fourth regulatory period and, as set out in the Regulator's PSP Guideline, TasWater must use a tax rate equal to zero that will result in the tax allowance component of its cost build-up also equalling zero.

2.6 Notional Allowable Revenue

TasWater's proposed building block components and NAR for each year of the fourth regulatory period are shown in Table 2.8.

Table 2.8 TasWater's proposed NAR (\$'000)

Building block component	2022-23	2023-24	2024-25	2025-26
Return on capital - existing	92,746	92,050	91,347	90,870
Return on capital - new	82,655	94,272	105,100	114,679
Depreciation	102,761	108,828	115,237	124,821
Inflationary gain	-54,792	-67,432	-80,983	-94,952
Opex	200,066	206,065	213,533	220,722
Tax	0	0	0	0
Total	423,436	433,783	444,234	456,140

TasWater states in its proposed PSP that, based on its calculation of the NAR, and its forecast demand, an annual price increase of 6.5 per cent would be required so that the NAR is recovered in

the last year of the fourth regulatory period (2025-26).⁶ Under scenario, TasWater's revenue would transition to the NAR over the fourth regulatory period.

In accordance with TasWater's Memorandum of Understanding with the Tasmanian Government of 1 May 2018, TasWater agreed to a price cap of 3.5 per cent per annum until 30 June 2025. TasWater has proposed in its PSP that its price increase for the final year of the fourth regulatory period, 2025-26, is also 3.5 per cent.

The Regulator's values for each building block component and NAR for each year of the fourth regulatory period is provided in Table 2.9.

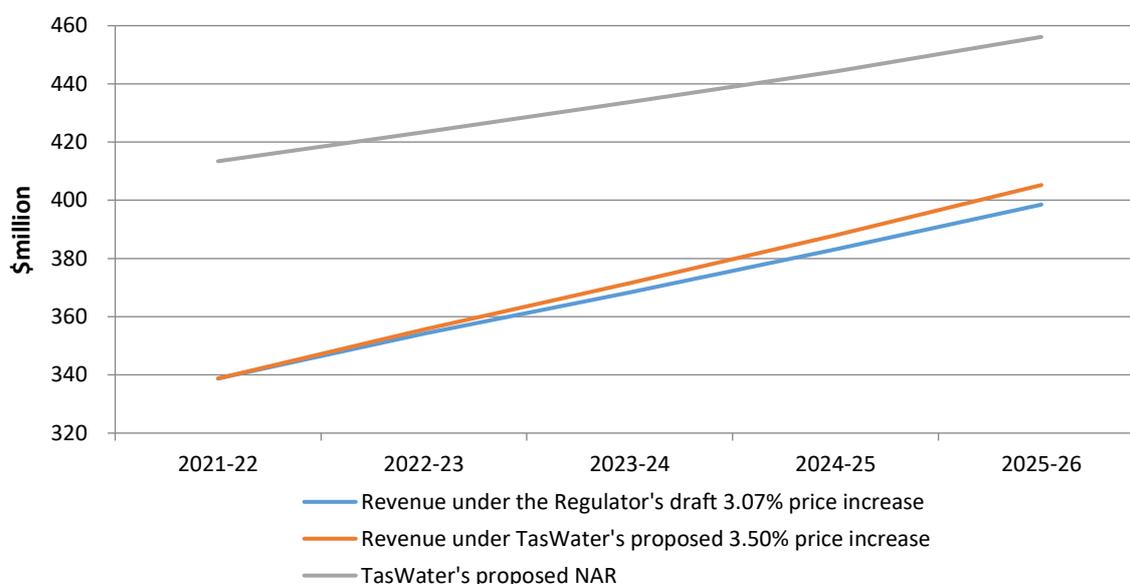
Table 2.9 Regulator's NAR (\$'000)

Building block component	2022-23	2023-24	2024-25	2025-26
Return on capital - existing	82,196	82,420	82,468	82,533
Return on capital - new	72,206	79,429	87,187	95,177
Depreciation	98,766	104,043	109,662	118,777
Inflationary gain	-90,165	-94,261	-97,873	-102,280
Opex	193,068	195,986	199,867	204,999
Tax	0	0	0	0
Total	356,071	367,617	381,311	399,205

Based on the Regulator's NARs, an annual uniform price increase of 3.07 per cent is required to recover the aggregate of the annual NARs over the fourth regulatory period.

A comparison of TasWater's proposed NARs, the revenue based on TasWater's 3.5 per cent price increase and the revenue based on the Regulator's draft 3.07 per cent price increase is shown in Figure 2.1.

Figure 2.1 Revenue comparison



The NAR for the fourth regulatory period will be updated in the Regulator's final report to factor in changes in the WACC and the Regulator's review of information received in response to this Draft Report.

⁶ TasWater's proposed PSP, pages 181-182.