

10 RETURN ON CAPITAL

The return on capital is a component of the MARR as noted in Section 1.5.1 of this Final Report. The value of capital invested in a regulated business is deemed to equal the value of the RAB. The return on the capital invested in a regulated business is calculated as the value of the RAB multiplied by the appropriate WACC. The RAB is comprised of the assets used to provide regulated services with the value of the RAB adjusted each year to allow for capex, regulatory depreciation, third party contributions, asset disposals and inflation.

As discussed in Section 9.1 of this Final Report, section 68(1A) of the Industry Act effectively creates two groups of assets, one for assets transferred to the previous regulated entities before 1 July 2011 (referred to as Existing Assets) and another for assets purchased or constructed by the previous regulated entities, and now TasWater, after 1 July 2009 (referred to as New Assets). This in turn necessitates two separate RABs, one for Existing Assets (RAB_{EXISTING}) and another for New Assets (RAB_{NEW}).

10.1 Regulatory Asset Bases

Clause 7.2 of the PSP Guideline specifies how each RAB should be rolled forward each year to account for capex, regulatory depreciation, third party contributions, asset disposals and inflation. The RAB values used to calculate the return on capital are the average of the each RABs opening and closing balance for each year of the regulatory period.

TasWater's proposed RAB values for calculating the return on capital are summarised in Table 10.1.

Table 10.1 TasWater's proposed RAB values for calculating return on capital (\$'000s)

	2018-19	2019-20	2020-21
Existing Assets	2 498 482	2 481 739	2 464 260
New Assets	664 963	779 445	890 298

In its proposed Price and Service Plan, TasWater calculated RAB roll forward values from 2015-16 using a line-by-line depreciation approach, which is discussed in Chapter 8.

In its Draft Report the Economic Regulator proposed not accepting TasWater's proposal to apply a line-by-line approach to calculating regulatory depreciation for Existing Assets. However the Economic Regulator proposed using a line-by-line approach for New Assets. This means that the Economic Regulator's regulatory depreciation value for the RAB_{EXISTING} differs significantly from that proposed by TasWater.

As noted in Chapter 8 the Economic Regulator has maintained its Draft Report proposals with respect to the calculation of regulatory depreciation on Existing Assets.

Relative to the Economic Regulator's Draft Report, in this Final Report the Economic Regulator requires TasWater to only calculate regulatory depreciation on new capex (commenced post 1 July 2018) once the asset is commissioned and to calculate regulatory depreciation for Existing Assets based on the undepreciated Existing RAB opening balance for 2015-16.

In addition, TasWater based its RAB values on its proposed capex. As discussed in Chapter 6, the Economic Regulator has reduced TasWater's capex to account for Arup's recommendations.

The Economic Regulator has rolled forward each RAB from the start of the second regulatory period, to the end of the third regulatory period. The values for the period from 1 July 2015 to 30 June 2017 inclusive are based on actual values while the values for the period 1 July 2017 to 30 June 2021 inclusive are forecast values. Table 10.2 shows the RAB roll forward applying the Economic Regulator's decisions on regulatory depreciation and capex.

Table 10.2 Economic Regulator's RAB roll forward (\$'000s)

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Inflation applied	1.50%	1.00%	1.90%	2.25%	2.25%	2.25%
Existing Sewerage assets						
Closing balance from previous year	1 242 003	1 226 914	1 206 394	1 196 445	1 197 551	1 197 830
Opening balance adjusted for inflation	1 260 633	1 239 184	1 229 315	1 223 365	1 224 496	1 224 781
Disposals	1 745	525	0	0	429	0
Depreciation rate	2.54%	2.54%	2.54%	1.95%	1.94%	1.93%
Depreciation	31 974	32 264	32 871	25 814	26 237	26 668
Closing balance	1 226 914	1 206 394	1 196 445	1 197 551	1 197 830	1 198 114
Existing Water assets						
Closing balance from previous year	1 347 913	1 333 901	1 314 483	1 305 732	1 307 072	1 308 008
Opening balance adjusted for inflation	1 368 132	1 347 241	1 339 458	1 335 111	1 336 481	1 337 438
Disposals	1 965	196	554	30	0	0
Depreciation rate	2.36%	2.36%	2.36%	1.95%	1.94%	1.93%
Depreciation	32 265	32 562	33 171	28 010	28 473	28 945
Closing balance	1 333 901	1 314 483	1 305 732	1 307 072	1 308 008	1 308 493
New Sewerage assets						
Closing balance from previous year	174 792	205 754	232 080	271 409	325 376	372 810
Opening balance adjusted for inflation	177 414	207 811	236 490	277 516	332 697	381 198
Capex	57 128	49 603	59 405	67 008	61 250	38 601
Disposals	439	141	0	0	59	0
Third party contributions	15 008	10 226	9 148	2 456	2 526	2 639
Depreciation (line-by-line)	13 341	14 967	15 337	16 692	18 551	20 190
Closing balance	205 754	232 080	271 409	325 376	372 810	396 970
New Water assets						
Closing balance from previous year	251 018	292 343	336 875	387 744	448 778	513 076
Opening balance adjusted for inflation	254 783	295 267	343 276	396 468	458 876	524 620
Capex	73 749	72 202	74 292	76 254	80 428	141 595
Disposals	489	40	27	17	0	0
Third party contributions	20 039	12 984	11 792	4 331	4 450	4 655
Depreciation (line-by-line)	15 662	17 570	18 005	19 596	21 778	23 702
Closing balance	292 343	336 875	387 744	448 778	513 076	637 858

Applying the information provided in Table 10.2, Table 10.3 shows the RAB values used by the Economic Regulator to calculate the return on capital.

Table 10.3 Economic Regulator's RAB values for calculating return on capital (\$'000s)

	2018-19	2019-20	2020-21
Existing assets	2 531 550	2 533 408	2 534 413
New assets	724 069	838 729	970 323

10.2 Return on capital

In its proposed PSP, TasWater proposed WACC values and RAB values as shown in Table 9.1 and Table 10.1 respectively. TasWater's return on capital for each year of the third regulatory period, based on these proposed values is outlined in Table 10.4.

Table 10.4 TasWater's proposed return on capital (\$'000s)

	2018-19	2019-20	2020-21
Existing assets			
RAB	2 498 482	2 481 739	2 464 260
WACC	4.49%	4.49%	4.49%
Return on Capital	112 224	111 472	110 687
New assets			
RAB	664 963	779 445	890 298
WACC	6.87%	6.87%	6.87%
Return on Capital	45 684	53 549	61 165
Total return on Capital	157 908	165 021	171 852

Note: Figures in this table may not sum to the total due to rounding.

Based on the Economic Regulator's decisions in this Final Report on TasWater's WACCs and RABs as shown in Table 9.3 and Table 10.3 respectively, Table 10.5 shows the Economic Regulator's calculation of TasWater's return on capital for each year of the third regulatory period.

Table 10.5 Economic Regulator's return on capital (\$'000s)

	2018-19	2019-20	2020-21
Existing assets			
RAB	2 531 550	2 533 408	2 534 413
WACC	3.96%	3.96%	3.96%
Return on Capital	100 224	100 297	100 337
New assets			
RAB	724 069	838 729	970 323
WACC	5.82%	5.82%	5.82%
Return on Capital	42 117	48 787	56 441
Total return on capital	142 341	149 084	156 778

Note: Figures in this table may not sum to the total due to rounding.