

10 RETURN ON CAPITAL

As noted in Section 1.5.1 the return on capital is a component of TasWater's MARR with the value of capital invested in a regulated business equal to the value of the RAB. The RAB is comprised of the assets used to provide regulated services.

The value of the RAB is adjusted each year to allow for capex, depreciation, third party contributions, assets disposals and inflation. Therefore, the return on the capital invested in a regulated business is calculated as the RAB multiplied by an appropriate WACC.

As discussed in section 9.1 of this Draft Report, section 68(1A) of the WSI 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 necessitates two separate RABs, one for existing assets (RAB_{EXISTING}) and another for new assets (RAB_{NEW}).

10.1 RAB

Section 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, disposals and inflation. The RAB values used to calculate the return on capital are the average of the each RAB's opening and closing balance for each year of the regulatory period.

TasWater's proposed RAB values for calculating the return on capital are provide 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.

The Economic Regulator does not intend to accept TasWater's proposal to apply a line by line approach to calculating regulatory depreciation for existing assets. The Economic Regulator does however propose 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.

In addition, TasWater based its RAB vales on its proposed capex. As discussed in Chapter 6, the Economic Regulator is proposing reductions in TasWater's capex to account for gifted assets and intends accepting Arup's recommendations regarding capex. These proposals result in lower capex values than those proposed by TasWater.

The Economic Regulator has rolled forward the 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 intended approach to 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	1 207 214	1 198 929	1 202 008	1 204 809
Opening Balance Adjusted for inflation	1 260 633	1 239 184	1 230 151	1 225 904	1 229 053	1 231 917
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	31 445	31 222	23 897	23 815	23 736
Closing balance	1 226 914	1 207 214	1 198 929	1 202 008	1 204 809	1 208 181
Existing Water Assets						
Closing balance from previous year	1 347 913	1 333 901	1 315 252	1 308 064	1 311 394	1 314 914
Opening Balance Adjusted for inflation	1 368 132	1 347 241	1 340 242	1 337 495	1 340 901	1 344 500
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	31 793	31 623	26 072	25 986	25 906
Closing balance	1 333 901	1 315 252	1 308 064	1 311 394	1 314 914	1 318 594
New Sewerage Assets						
Closing balance from previous year	174 792	204 900	231 458	272 489	321 006	362 746
Opening Balance Adjusted for inflation	177 414	206 949	235 856	278 620	328 229	370 908
Capex	57 128	49 603	59 405	61 615	56 135	33 468
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)	14 195	14 727	13 623	16 773	19 033	20 402
Closing balance	204 900	231 458	272 489	321 006	362 746	381 334
New Water Assets						
Closing balance from previous year	251 018	293 204	339 386	391 792	446 355	504 330
Opening Balance Adjusted for inflation	254 783	296 136	345 834	400 607	456 398	515 677
Capex	73 749	72 202	74 292	70 060	74 660	135 806
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)	14 801	15 928	16 516	19 963	22 278	25 730

Closing balance	293 204	339 386	391 792	446 355	504 330	621 098
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Table 10.3 shows the RAB values used to calculate the return on capital based on the information provided in Table 10.2.

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

	2018-19	2019-20	2020-21
Existing assets	2 538 401	2 544 838	2 551 596
New assets	723 294	825 851	944 508

10.2 Return on capital

Based on TasWater's WACC values in Table 9.2 and the RAB values in Table 10.1, TasWater's return on capital for each year of the third regulatory period is provided 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 WACC values in Table 9.3 and the RAB values in Table 10.3, the Economic Regulator's return on capital for each year of the third regulatory period is provided in Table 10.5.

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

	2018-19	2019-20	2020-21
Existing assets			
RAB	2 538 401	2 544 838	2 551 596
WACC	4.00%	4.00%	4.00%
Return on Capital	101 481	101 738	102 008
New assets			
RAB	723 294	825 851	944 508
WACC	5.86%	5.86%	5.86%
Return on Capital	42 403	48 415	55 372
Total return on capital	143 884	150 154	157 380

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