

ATTACHMENT K: DATA COLLECTION TEMPLATE

**Water & Sewerage Data Request for the second regulatory period ( 1 July 2015- 30 June 2018)**

- This template is designed to provide the Regulator with data required to determine each regulated entities' upper, statutory and lower revenue limits for the 2014-15 Pricing Investigation.
- Data provided must correlate with data provided by the regulated entity in it's Price & Service Plan and Pricing model.

Components of revenue limits			
Upper	Statutory	Lower	
			O&M expenses
			Interest
			Return on Capital - RAB x WACC
			Return of Capital - RAB x Depreciation rate
			Asset Replacement/Renewal

Shading key:

Input cells
Calculation cells
Hardcoded cells
Illustrative only - components of upper, statutory & lower limit revenue formulas

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**REGULATORY ASSET BASE (RAB) - EXISTING ASSETS**

(Assets transferred to previous regulated entities before 1 July 2011)

**CALCULATION OF OPENING RAB** Existing assets

DORC asset value as at 30 June 2013  
 add: depreciation relating to unregulated assets  
       unregulated disposals  
 less: unregulated assets  
       unregulated transferred assets  
**RAB** Existing Assets **Opening Balance - as at 1 July 2013**

Actual	
Water	Sewerage
\$'000	\$'000
1,414,757.00	1,308,491.28
<b>1,414,757.00</b>	<b>1,308,491.28</b>

This is the opening value of the RAB which will be rolled forward until the start of the second regulatory period on 1 July 2015.

**Please provide details of basis of allocation between (1) water & Sewerage and (2) regulated & unregulated assets**

Allocated based on data within the asset register, i.e. Asset class & type. Non-network assets are proportionally allocated to water or sewerage based on the split for network assets. Unregulated assets not disclosed as the "roll forward" RAB has been derived from the corresponding schedules prepared by SW, BLW and CMW in 2011 which did not accurately record unregulated assets.

**RAB** Existing Assets **ROLL FORWARD TO START OF REGULATORY PERIOD ON 1 JULY 2015**

RAB Existing assets opening balance  
 add: transferred assets (**regulated assets only**)  
 less: regulated disposals Existing assets  
       regulated depreciation Existing assets  
 RAB Existing assets closing balance  
 indexation  
 RAB Existing assets closing balance indexed

**Water (nominal)**

Actual	Budget
2013-14	2014-15
\$'000	\$'000
<b>1,414,757.00</b>	<b>1,376,446.52</b>
0.00	0.00
38,310.48	38,310.48
1,376,446.52	1,338,136.04
0.00	0.00
<b>1,376,446.52</b>	<b>1,338,136.04</b>

**Sewerage (nominal)**

Actual	Budget
2013-14	2014-15
\$'000	\$'000
<b>1,308,491.28</b>	<b>1,271,771.56</b>
0.00	0.00
36,719.72	36,719.72
1,271,771.56	1,235,051.84
0.00	0.00
<b>1,271,771.56</b>	<b>1,235,051.84</b>

These are the values of the RAB Existing assets at the start of the second regulatory period

Inflation rate to roll forward RAB  
 (actual then forecast - June on June quarter)

2013-14	2014-15	2015-16	2016-17	2017-18
0	0	0	0	0

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**REGULATORY ASSET BASE (RAB) - NEW ASSETS**

(Assets purchased since 1 July 2009)

**CALCULATION OF OPENING RAB<sub>New Assets</sub> AS AT 1 JULY 2013**

**RAB<sub>New assets</sub> Opening Balance - as at 1 July 2013**

Actual	
Water	Sewerage
\$'000	\$'000
<b>221,096.00</b>	<b>106,214.00</b>

**Please provide details of basis of allocation between (1) water & Sewerage and (2) regulated & unregulated assets**

Allocated based on data within the asset register, i.e. Asset class & type. Non-network assets are proportionally allocated to water or sewerage based on the split for network assets.

**RAB<sub>New Assets</sub> ROLL FORWARD TO START OF REGULATORY PERIOD ON 1 JULY 2015**

RAB<sub>New assets</sub> opening balance  
 add: regulated capex  
 less: regulated disposals<sub>New assets</sub>  
       regulated depreciation<sub>New assets</sub>  
       3rd party contributions  
 RAB<sub>New assets</sub> closing balance  
       indexation  
 RAB<sub>New assets</sub> closing balance indexed

**Water (nominal)**

Actual	Budget
2013-14	2014-15
\$'000	\$'000
<b>221096.00</b>	<b>248835.70</b>
37842.00	33685.00
0.00	0.00
5621.30	6713.74
4481.00	3778.00
248835.70	272028.95
0.00	0.00
<b>248835.70</b>	<b>272028.95</b>

**Sewerage (nominal)**

Actual	Budget
2013-14	2014-15
\$'000	\$'000
<b>106214.00</b>	<b>141819.34</b>
43328.00	62965.00
0.00	0.00
3241.66	4756.85
4481.00	3778.00
141819.34	196249.48
0.00	0.00
<b>141819.34</b>	<b>196249.48</b>

These are the values of the RAB<sub>New assets</sub> at the start of the second regulatory period

Inflation rate to roll forward RAB  
 (actual then forecast - June on June quarter)

2013-14	2014-15	2015-16	2016-17	2017-18
0	0	0	0	0

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**CAPITAL EXPENDITURE (CAPEX)**

	Actual	Budget	Forecast		
	2013-14 \$'000	2014-15 \$'000	2015-16 \$'000	2016-17 \$'000	2017-18 \$'000
Total Capex	81,952.00	97,555.00	118,841.00	119,239.00	118,138.00
Less unregulated Capex	782.00	905.00	1,096.00	1,300.00	0.00
<b>Regulated Capex</b>	<b>81,170.00</b>	<b>96,650.00</b>	<b>117,745.00</b>	<b>117,939.00</b>	<b>118,138.00</b>

Please provide basis of allocation between regulated and unregulated categories and an explanation of year-on-year variations.

Allocated based on data within the asset register, i.e. Asset class & type. Non-network assets are proportionally allocated to water or sewerage based on the split for network assets.

Total regulated capex is inclusive of "donated assets". Donated assets are excluded from the closing RAB calculations.

Regulated CAPEX must be split between water and Sewerage and allocated across the cost drivers below.

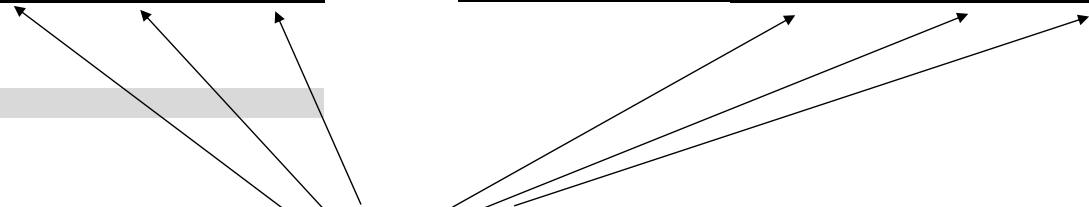
	Water (nominal)		Forecast		
	Actual 2013-14 \$'000	Budget 2014-15 \$'000	2015-16 \$'000	2016-17 \$'000	2017-18 \$'000
<b>COST DRIVERS</b>					
Growth	5,066.00	6,674.00	7,232.00	6,156.00	15,925.00
Renewal of existing infrastructure	9,803.00	8,326.00	8,112.00	5,780.00	8,585.00
Improvement in service	5,364.00	4,198.00	11,990.00	10,002.00	10,705.00
Compliance	17,609.00	14,487.00	24,803.00	30,413.00	14,616.00
<b>Total regulated CAPEX</b>	<b>37,842.00</b>	<b>33,685.00</b>	<b>52,137.00</b>	<b>52,351.00</b>	<b>49,831.00</b>

	Sewerage (nominal)		Forecast		
	Actual 2013-14 \$'000	Budget 2014-15 \$'000	2015-16 \$'000	2016-17 \$'000	2017-18 \$'000
	6,912.00	11,102.00	5,138.00	4,750.00	7,319.00
	9,592.00	13,882.00	10,731.00	10,785.00	11,156.00
	3,156.00	7,401.00	11,791.00	8,486.00	10,150.00
	23,668.00	30,580.00	37,948.00	41,567.00	39,682.00
	43,328.00	62,965.00	65,608.00	65,588.00	68,307.00

Check (should sum to zero)



These are CAPEX values for the second regulatory period.



[Return to Index](#)**Disposal of assets****Existing assets**

Total disposals  
Less unregulated disposals  
**Regulated disposals**

**Water (nominal)**

Actual	Budget	Forecast		
2013-14	2014-15	2015-16	2016-17	2017-18
\$'000	\$'000	\$'000	\$'000	\$'000
0.00	0.00	0.00	0.00	0.00

**Sewerage (nominal)**

Actual	Budget	Forecast		
2013-14	2014-15	2015-16	2016-17	2017-18
\$'000	\$'000	\$'000	\$'000	\$'000
0.00	0.00	0.00	0.00	0.00

Please provide basis of allocation between regulated and unregulated categories and an explanation of year-on-year variations.

**New assets**

Total disposals  
Less unregulated disposals  
**Regulated disposals**

**Water (nominal)**

Actual	Budget	Forecast		
2013-14	2014-15	2015-16	2016-17	2017-18
\$'000	\$'000	\$'000	\$'000	\$'000
0.00	0.00	0.00	0.00	0.00

**Sewerage (nominal)**

Actual	Budget	Forecast		
2013-14	2014-15	2015-16	2016-17	2017-18
\$'000	\$'000	\$'000	\$'000	\$'000
0.00	0.00	0.00	0.00	0.00

Please provide basis of allocation between regulated and unregulated categories and an explanation of year-on-year variations.

**3rd party contributions**

3rd party contributions - headworks  
3rd party contributions - cash for reticulation assets  
3rd party contributions - reticulation assets  
3rd party contributions - Govt grants  
3rd party contributions - service introduction charges  
**3rd party contributions - Total**

**Water (nominal)**

Actual	Budget	Forecast		
2013-14	2014-15	2015-16	2016-17	2017-18
\$'000	\$'000	\$'000	\$'000	\$'000
4,481.00	3,778.00	3,873.00	3,970.00	4,070.00
4,481.00	3,778.00	3,873.00	3,970.00	4,070.00

**Sewerage (nominal)**

Actual	Budget	Forecast		
2013-14	2014-15	2015-16	2016-17	2017-18
\$'000	\$'000	\$'000	\$'000	\$'000
4,481.00	3,778.00	3,872.00	3,969.00	4,068.00
4,481.00	3,778.00	3,872.00	3,969.00	4,068.00

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**OPERATING AND MAINTENANCE EXPENSES (O&M)**

	Nominal	
	Actual	Budget
	2013-14	2014-15
	\$'000	\$'000
Total O&M expenses	156,693.00	160,360.00
O&M expenses relating to unregulated assets	3,781.00	4,027.00
<b>Total O&amp;M expenses relating to regulated assets</b>	<b>152,912.00</b>	<b>156,333.00</b>

**Please provide basis of allocation between regulated and unregulated categories and year-on-year variations**

Where possible expenses are allocated directly to regulated or unregulated based on the asset code / posting group that has been applied within the general ledger. Where such allocations are not possible, expenses are allocated between regulated and unregulated based on a pro-rata proportion of total revenue or total assets, depending on which approach is more appropriate.

Regulated O&M expenses must be split between (1) water and Sewerage, and (2) labour and non-labour.

	Water		Sewerage	
	Nominal		Nominal	
	Actual	Budget	Actual	Budget
	2013-14	2014-15	2013-14	2014-15
	\$'000	\$'000	\$'000	\$'000
Regulated O&M expenses - non labour	37,849.00	39,721.00	40,929.00	45,119.00
Regulated O&M expenses - labour	37,120.00	35,552.00	37,014.00	35,941.00
<b>Total O&amp;M expenses relating to regulated assets</b>	<b>74,969.00</b>	<b>75,273.00</b>	<b>77,943.00</b>	<b>81,060.00</b>

Check (should sum to zero)

This is the base value for the O&M labour and non-labour expenses for the second regulatory period.

**Please provide basis for allocation between (1) water and Sewerage and (2) labour and non-labour**

Where possible expenses are allocated directly to water or sewerage based on the asset code / posting group that has been applied within the general ledger. Where such allocations are not possible, expenses are allocated between regulated and unregulated based on a pro-rata proportion of total revenue or total assets, depending on which approach is more appropriate.

The budgeted non-labour and labour O&M expenses in 2014-15 will be used as a base figure for the first financial year of the second regulatory period. Any forecast changes to O&M expenses (relating to regulated assets only) must be specified below and will be added to/subtracted from the base figure in the first financial year of the second regulatory period and rolled forward in subsequent years.

	Water			Sewerage		
	Forecast			Forecast		
	2015-16	2016-17	2017-18	2015-16	2016-17	2017-18
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Total forecast O&M expense adjustments (non-labour)	836.00	1,850.00	2,889.00	987.00	2,139.00	3,321.00
Total forecast O&M expense adjustments (labour)	1,066.00	2,165.00	3,297.00	1,079.00	2,189.00	3,333.00

**Please provide reasons for adjustments including year(s) to which they apply.**

CPI of 2.5 per cent has been assumed for the regulatory period, which is aligned to the mid-point of the RBA's target inflation band. This escalation factor has been applied to all expenditure items with the exception of salaries (3 per cent) and power and chemicals (4 per cent), which have been escalated above CPI to reflect higher

These amounts are cumulative changes.  
 Eg. 1  
 2, 3, 3, means an increase of 2 in 2015-16, an increase of 1 in 2016-17 and no change in 2017-18.  
 Eg. 2  
 0, 2, 0 means no change 2015-16, a increase of 2 in 2016-17 and a

operating costs associated with TasWater's capital program which is currently focused on compliance and levels of service.

The aggregate (base plus adjustment) of the labour component for each regulated service will be indexed annually by the forecast real increases in the average weekly earnings offset by an labour productivity factor.

Proposed annual labour productivity factor for O&M expenses (labour)

Forecast		
2015-16	2016-17	2017-18

The Regulator will take the regulated entities proposed annual labour productivity factors into consideration when determining the values that will apply during the second regulatory period.

**Please provide basis for determining the annual labour productivity factors for the second regulatory period.**

CPI of 2.5 per cent has been assumed for the regulatory period, which is aligned to the mid-point of the RBA's target inflation band. This escalation factor has been applied to all expenditure items with the exception of salaries (3 per cent) and power and chemicals (4 per cent), which have been escalated above CPI to reflect higher operating costs associated with TasWater's capital program which is currently focused on compliance and levels of service.

Total O&M expenses for each regulated service will be adjusted annually by an economies of scale efficiency factor

Proposed economies of scale efficiency factor for total O&M expenses.

Forecast		
2015-16	2016-17	2017-18

The Regulator will take the regulated entities proposed economies of scale efficiency factors into consideration when determining the values that will apply during the second regulatory period.

**Please provide basis for determining economic efficiency gains expected during the second regulatory period.**

CPI of 2.5 per cent has been assumed for the regulatory period, which is aligned to the mid-point of the RBA's target inflation band. This escalation factor has been applied to all expenditure items with the exception of salaries (3 per cent) and power and chemicals (4 per cent), which have been escalated above CPI to reflect higher operating costs associated with TasWater's capital program which is currently focused on compliance and levels of service.



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ASSET RENEWAL ANNUITY - WATER

(All values in 2014-15 \$'000)

Financial Years ending 30 June	Asset Replacement / Renewal / Compliance capex					TOTAL	PV of Total	Equivalent annuity	PV of equiv. annuity	No. of years
	renewal	Compliance								
2015	24,526.75	36,917.37				61,444.12	58,312.73	45,510.76	43,191.38	1
2016	13,002.93	29,850.37				42,853.30	38,596.71	45,510.76	40,990.21	2
2017	18,893.09	25,377.00				44,270.09	37,840.73	45,510.76	38,901.21	3
2018	14,268.69	6,806.00				21,074.69	17,095.95	45,510.76	36,918.68	4
2019	34,419.33	25,361.00				59,780.33	46,022.84	45,510.76	35,037.18	5
2020	22,289.28	31,136.00				53,425.28	39,034.17	45,510.76	33,251.57	6
2021	11,718.94	15,131.00				26,849.94	18,617.63	45,510.76	31,556.96	7
2022	41,785.02	7,175.00				48,960.02	32,218.53	45,510.76	29,948.72	8
2023	40,833.52	574.00				41,407.52	25,859.87	45,510.76	28,422.43	9
2024	16,842.35	65.00				16,907.35	10,020.88	45,510.76	26,973.93	10
2025	22,706.37	0.00				22,706.37	12,772.06	45,510.76	25,599.25	11
2026	2,638.99	0.00				2,638.99	1,408.75	45,510.76	24,294.63	12
2027	10,224.83	0.00				10,224.83	5,180.07	45,510.76	23,056.50	13
2028	77,058.90	0.00				77,058.90	37,049.73	45,510.76	21,881.46	14
2029	12,251.54	2,547.37				14,798.91	6,752.66	45,510.76	20,766.31	15
2030	11,254.13	2,547.37				13,801.50	5,976.61	45,510.76	19,707.99	16
2031	16,443.18	2,547.37				18,990.55	7,804.57	45,510.76	18,703.61	17
2032	25,207.99	2,547.37				27,755.36	10,825.33	45,510.76	17,750.41	18
2033	42,141.85	2,547.37				44,689.22	16,541.70	45,510.76	16,845.79	19
2034	13,325.16	2,547.37				15,872.53	5,575.79	45,510.76	15,987.28	20
2035	17,116.92	2,547.37				19,664.29	6,555.74	45,510.76	15,172.51	21
2036	20,768.41	2,547.37				23,315.78	7,376.94	45,510.76	14,399.27	22
2037	93,254.86	2,547.37				95,802.23	28,766.37	45,510.76	13,665.44	23
2038	21,629.86	2,547.37				24,177.23	6,889.68	45,510.76	12,969.00	24
2039	20,885.13	2,547.37				23,432.50	6,337.15	45,510.76	12,308.06	25
2040	72,369.92	2,547.37				74,917.29	19,228.29	45,510.76	11,680.80	26
2041	35,775.55	2,547.37				38,322.92	9,334.69	45,510.76	11,085.51	27
2042	32,316.47	2,547.37				34,863.84	8,059.35	45,510.76	10,520.55	28
2043	58,688.76	2,547.37				61,236.13	13,434.31	45,510.76	9,984.39	29
2044	24,453.45	2,547.37				27,000.82	5,621.70	45,510.76	9,475.56	30
2045	39,977.89					39,977.89	7,899.39	45,510.76	8,992.65	31
2046	39,977.89					39,977.89	7,496.81	45,510.76	8,534.36	32
2047	39,977.89					39,977.89	7,114.75	45,510.76	8,099.42	33
2048	39,977.89					39,977.89	6,752.16	45,510.76	7,686.64	34
2049	39,977.89					39,977.89	6,408.04	45,510.76	7,294.91	35
2050	39,977.89					39,977.89	6,081.47	45,510.76	6,923.14	36
2051	39,977.89					39,977.89	5,771.54	45,510.76	6,570.31	37
2052	39,977.89					39,977.89	5,477.40	45,510.76	6,235.47	38
2053	39,977.89					39,977.89	5,198.26	45,510.76	5,917.69	39
2054	39,977.89					39,977.89	4,933.34	45,510.76	5,616.10	40
2055	39,977.89					39,977.89	4,681.92	45,510.76	5,329.89	41
2056	39,977.89					39,977.89	4,443.31	45,510.76	5,058.26	42
2057	39,977.89					39,977.89	4,216.87	45,510.76	4,800.47	43
2058	39,977.89					39,977.89	4,001.96	45,510.76	4,555.82	44
2059	39,977.89					39,977.89	3,798.01	45,510.76	4,323.64	45
2060	39,977.89					39,977.89	3,604.45	45,510.76	4,103.30	46
2061	39,977.89					39,977.89	3,420.75	45,510.76	3,894.18	47
2062	39,977.89					39,977.89	3,246.42	45,510.76	3,695.72	48
2063	39,977.89					39,977.89	3,080.97	45,510.76	3,507.37	49

The annuity must be for a minimum of 30 years but can be for a longer time period.  
 To increase the time period select the bottom row of the data table and insert the required number of rows. Copy the formulas (cells shaded in grey) down, over the last row of the data table. This process will minimise the chance of formula errors.

2064	39,977.89				39,977.89	2,923.96	45,510.76	3,328.63	50	
2065	39,977.89				39,977.89	2,774.94	45,510.76	3,158.99	51	
2066	39,977.89				39,977.89	2,633.52	45,510.76	2,998.00	52	
2067	39,977.89				39,977.89	2,499.31	45,510.76	2,845.21	53	
2068	39,977.89				39,977.89	2,371.94	45,510.76	2,700.21	54	
2069	39,977.89				39,977.89	2,251.05	45,510.76	2,562.60	55	
2070	39,977.89				39,977.89	2,136.33	45,510.76	2,432.00	56	
2071	39,977.89				39,977.89	2,027.46	45,510.76	2,308.06	57	
2072	39,977.89				39,977.89	1,924.13	45,510.76	2,190.43	58	
2073	39,977.89				39,977.89	1,826.07	45,510.76	2,078.80	59	
2074	113,925.77				113,925.77	4,938.59	45,510.76	1,972.86	60	
		2142 377	219 151	0	0	0	2361 527	671 047	2730 646	810 762

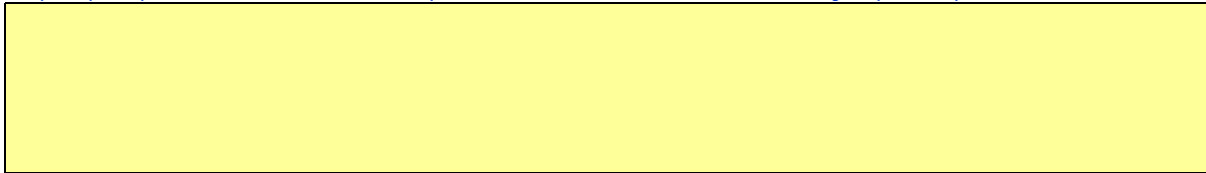


Equiv. annuity =  $NPV * r / (1-(1+r)^{-n})$

r	5.37%
n	30
Equiv. annuity	45,510.76

The discount rate (r) applied to the annuity for determining the lower revenue limit will be the regulatory WACC as determined by the Regulator. The current value of (r) is for illustrative purposes only and does not reflect the final regulatory WACC.

If required, please provided derivation of increase to annuity to accommodate uncertainties associated with meeting compliance requirements.



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**ASSET RENEWAL ANNUITY - Sewerage**

(All values in 2014-15 \$'000)

Financial Years ending 30 June	Asset Replacement / Renewal / Compliance capex						PV of Total	Equivalent annuity	PV of equiv. annuity	No. of years
	renewal	Compliance				TOTAL				
2015	9,107.34	43,611.33				52,718.67	50,031.95	49,679.53	47,147.70	1
2016	11,045.34	58,526.33				69,571.67	62,661.17	49,679.53	44,744.90	2
2017	27,260.25	20,496.00				47,756.25	40,820.59	49,679.53	42,464.55	3
2018	11,797.20	21,078.00				32,875.20	26,668.62	49,679.53	40,300.42	4
2019	15,225.17	37,131.00				52,356.17	40,307.23	49,679.53	38,246.58	5
2020	11,153.64	40,940.00				52,093.64	38,061.23	49,679.53	36,297.41	6
2021	18,176.53	37,208.00				55,384.53	38,403.39	49,679.53	34,447.57	7
2022	37,663.05	38,351.00				76,014.05	50,021.65	49,679.53	32,692.01	8
2023	16,974.93	34,182.00				51,156.93	31,948.59	49,679.53	31,025.92	9
2024	25,280.28	0.00				25,280.28	14,983.46	49,679.53	29,444.74	10
2025	17,790.74	264.00				18,054.74	10,155.57	49,679.53	27,944.14	11
2026	10,530.85	461.00				10,991.85	5,867.69	49,679.53	26,520.01	12
2027	26,434.99	1,493.00				27,927.99	14,148.78	49,679.53	25,168.47	13
2028	19,934.62	21,573.00				41,507.62	19,956.76	49,679.53	23,885.80	14
2029	40,958.99	2,033.33				42,992.32	19,617.16	49,679.53	22,668.50	15
2030	19,563.03	2,033.33				21,596.36	9,352.09	49,679.53	21,513.24	16
2031	50,378.94	2,033.33				52,412.27	21,539.93	49,679.53	20,416.85	17
2032	18,403.27	2,033.33				20,436.60	7,970.82	49,679.53	19,376.34	18
2033	15,431.81	2,033.33				17,465.14	6,464.72	49,679.53	18,388.86	19
2034	30,170.67	2,033.33				32,204.00	11,312.80	49,679.53	17,451.71	20
2035	18,260.03	2,033.33				20,293.36	6,765.46	49,679.53	16,562.31	21
2036	73,794.57	2,033.33				75,827.90	23,991.39	49,679.53	15,718.24	22
2037	23,797.41	2,033.33				25,830.74	7,756.15	49,679.53	14,917.19	23
2038	50,222.17	2,033.33				52,255.50	14,891.02	49,679.53	14,156.96	24
2039	32,830.55	2,033.33				34,863.88	9,428.69	49,679.53	13,435.47	25
2040	18,939.82	2,033.33				20,973.15	5,382.97	49,679.53	12,750.76	26
2041	31,017.93	2,033.33				33,051.26	8,050.62	49,679.53	12,100.94	27
2042	29,868.68	2,033.33				31,902.01	7,374.67	49,679.53	11,484.23	28
2043	35,347.52	2,033.33				37,380.85	8,200.81	49,679.53	10,898.96	29
2044	43,746.46	2,033.33				45,779.79	9,531.57	49,679.53	10,343.51	30
2045	34,939.50	2,033.33				36,972.83	7,305.61	49,679.53	9,816.37	31
2046	34,939.50	2,033.33				36,972.83	6,933.29	49,679.53	9,316.10	32
2047	34,939.50	0.00				34,939.50	6,218.08	49,679.53	8,841.32	33
2048	34,939.50					34,939.50	5,901.19	49,679.53	8,390.74	34
2049	34,939.50					34,939.50	5,600.44	49,679.53	7,963.12	35
2050	34,939.50					34,939.50	5,315.03	49,679.53	7,557.29	36
2051	34,939.50					34,939.50	5,044.16	49,679.53	7,172.15	37
2052	34,939.50					34,939.50	4,787.09	49,679.53	6,806.63	38
2053	34,939.50					34,939.50	4,543.12	49,679.53	6,459.74	39
2054	34,939.50					34,939.50	4,311.59	49,679.53	6,130.53	40
2055	34,939.50					34,939.50	4,091.86	49,679.53	5,818.10	41
2056	34,939.50					34,939.50	3,883.32	49,679.53	5,521.59	42
2057	34,939.50					34,939.50	3,685.42	49,679.53	5,240.19	43
2058	34,939.50					34,939.50	3,497.60	49,679.53	4,973.14	44
2059	34,939.50					34,939.50	3,319.35	49,679.53	4,719.69	45
2060	34,939.50					34,939.50	3,150.18	49,679.53	4,479.16	46
2061	34,939.50					34,939.50	2,989.64	49,679.53	4,250.89	47
2062	34,939.50					34,939.50	2,837.28	49,679.53	4,034.25	48
2063	34,939.50					34,939.50	2,692.68	49,679.53	3,828.65	49
2064	34,939.50					34,939.50	2,555.45	49,679.53	3,633.53	50
2065	34,939.50					34,939.50	2,425.22	49,679.53	3,448.35	51
2066	34,939.50					34,939.50	2,301.62	49,679.53	3,272.61	52

The annuity must be for a minimum of 30 years but can be for a longer time period

2067	34,939.50				34,939.50	2,184.32	49,679.53	3,105.83	53
2068	34,939.50				34,939.50	2,073.00	49,679.53	2,947.55	54
2069	34,939.50				34,939.50	1,967.36	49,679.53	2,797.33	55
2070	34,939.50				34,939.50	1,867.09	49,679.53	2,654.77	56
2071	34,939.50				34,939.50	1,771.94	49,679.53	2,519.47	57
2072	34,939.50				34,939.50	1,681.64	49,679.53	2,391.07	58
2073	34,939.50				34,939.50	1,595.93	49,679.53	2,269.22	59
2074	99,568.78				99,568.78	4,316.23	49,679.53	2,153.57	60
	1903 921	391 915	0	0	0	2295 836	732 514	2980 772	885 027

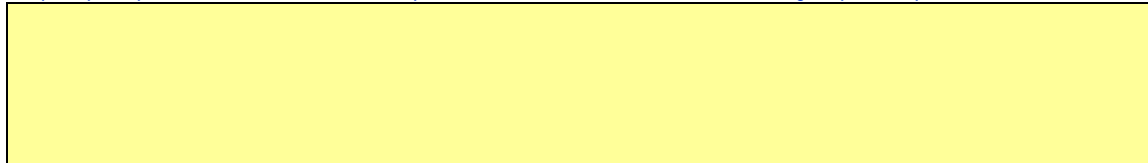
period.  
To increase the time period select the bottom row of the data table and insert the required number of rows. Copy the formulas (cells shaded in grey) down, over the last row of the data table. This process will minimise the chance of formula errors.

**Equiv. annuity =  $NPV * r / (1 - (1+r)^{-n})$**

r	5.37%
n	30
Equiv. annuity	49,679.53

The discount rate (r) applied to the annuity for determining the lower revenue limit will be the regulatory WACC as determined by the Regulator. The current value of (r) is for illustrative purposes only and does not reflect the final regulatory WACC.

If required, please provide derivation of increase to annuity to accommodate uncertainties associated with meeting compliance requirements.



**DEPRECIATION**

Regulatory depreciation for the determination will be calculated using the straight line depreciation method based on the opening value of the RAB on 1 July 2013 and the average expected life of assets.

**Existing Assets**

Average expected asset life (years)  
Depreciation Rate

**Water**

36.9	36.9
<b>2.71%</b>	<b>2.71%</b>

**Sewerage**

35.6	35.6
<b>2.81%</b>	<b>2.81%</b>

**Water (nominal)**

Actual	Budget
2013-14	2014-15
\$'000	\$'000
<b>1,414,757.00</b>	<b>1,414,757.00</b>
0.00	0.00
0.00	0.00
1,414,757.00	1,414,757.00
0.00	0.00
<b>1,414,757.00</b>	<b>1,414,757.00</b>

**Sewerage (nominal)**

Actual	Budget
2013-14	2014-15
\$'000	\$'000
<b>1,308,491.28</b>	<b>1,308,491.28</b>
0.00	0.00
0.00	0.00
1,308,491.28	1,308,491.28
0.00	0.00
<b>1,308,491.28</b>	<b>1,308,491.28</b>

RAB<sub>Existing assets</sub> opening balance

add: transferred assets

less: regulated disposals<sub>Existing assets</sub>

RAB<sub>Existing assets</sub> closing balance before depreciation

indexation

RAB<sub>Existing assets</sub> closing balance indexed

Depreciation<sub>Existing</sub>

<b>38,310.48</b>	<b>38,310.48</b>
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<b>36,719.72</b>	<b>36,719.72</b>
------------------	------------------

**New Assets**

Average expected asset life (years)  
Depreciation Rate

**Water**

42.3	40.1
<b>2.36%</b>	<b>2.49%</b>

**Sewerage**

38.8	36.3
<b>2.58%</b>	<b>2.75%</b>

**Water (nominal)**

Actual	Budget
2013-14	2014-15
\$'000	\$'000
<b>221096.00</b>	<b>254457.00</b>
37842.00	33685.00
0.00	0.00
4481.00	3778.00
254457.00	284364.00
0.00	0.000
<b>254457.00</b>	<b>284364.00</b>

**Sewerage (nominal)**

Actual	Budget
2013-14	2014-15
\$'000	\$'000
<b>106214.00</b>	<b>145061.00</b>
43328.00	62965.00
0.00	0.00
4481.00	3778.00
145061.00	204248.00
0.00	0.00
<b>145061.00</b>	<b>204248.00</b>

RAB<sub>New assets</sub> opening balance

add: regulated capex

less: regulated disposals<sub>New assets</sub>

3rd party contributions

RAB<sub>New assets</sub> closing balance

indexation

RAB<sub>New assets</sub> closing balance indexed

Depreciation<sub>New Assets</sub>

<b>5,621.30</b>	<b>6,713.74</b>
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<b>3,241.66</b>	<b>4,756.85</b>
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**Debt servicing costs**

Actual	Budget	Forecast		
2013-14	2014-15	2015-16	2016-17	2017-18
\$'000	\$'000	\$'000	\$'000	\$'000
20,658.03	21,116.80	<b>23,617.25</b>	<b>25,908.40</b>	<b>30,563.64</b>

Regulatory debt servicing costs for the second regulatory period will be calculated by multiplying total debt servicing costs by a ratio of regulated assets to total assets by total debt servicing costs  
 ie  

$$\frac{\text{regulated assets}}{\text{total assets}} \times \text{total debt servicing costs}$$

**Dividends**

Actual	Budget	Forecast		
2013-14	2014-15	2015-16	2016-17	2017-18
\$'000	\$'000	\$'000	\$'000	\$'000
16,159.80	20,729.58	<b>21,427.36</b>	<b>19,062.87</b>	<b>17,799.71</b>

Regulatory dividends for the second regulatory period will be calculated by multiplying total dividends by a ratio of regulated assets to total assets by total dividends.  
 ie  

$$\frac{\text{regulated assets}}{\text{total assets}} \times \text{total dividends}$$

**Assets**

	Actual	Budget	Forecast		
	2013-14	2014-15	2015-16	2016-17	2017-18
	\$'000	\$'000	\$'000	\$'000	\$'000
Total assets	3,303,122.95	3,305,942.39	3,327,963.04	3,346,194.57	3,360,682.61
Unregulated assets	264,249.84	264,475.39	266,237.04	267,695.57	268,854.61
<b>Regulated assets</b>	3,038,873.12	3,041,467.00	3,061,726.00	3,078,499.00	3,091,828.00
Ratio of regulated assets to total assets	92.00%	92.00%	<b>92.00%</b>	<b>92.00%</b>	<b>92.00%</b>

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**Revenue**

Regulated Revenue must exclude all unregulated revenue and third party contributions where all or any part of these items has been treated as revenue for accounting purposes.

	Actual 2013-14 \$'000	Budget 2014-15 \$'000	Forecast		
			2015-16 \$'000	2016-17 \$'000	2017-18 \$'000
Total Revenue	276,187.00	293,942.00	305,542.60	310,315.89	318,720.33
less: Unregulated Revenue	8,125.00	9,018.00	9,593.86	9,978.23	10,227.68
3rd party contributions - headworks	0.00	0.00	0.00	0.00	0.00
3rd party contributions - cash for reticulation assets	0.00	0.00	0.00	0.00	0.00
3rd party contributions - reticulation assets	8,962.00	7,556.00	7,745.00	7,939.00	8,138.00
3rd party contributions - Govt grants	0.00	0.00	0.00	0.00	0.00
3rd party contributions - service introduction charges	0.00	0.00	0.00	0.00	0.00
<b>Regulated Revenue</b>	<b>259,100.00</b>	<b>277,368.00</b>	<b>288,203.74</b>	<b>292,398.66</b>	<b>300,354.65</b>

**Please provide basis of allocation between regulated, unregulated and third party contributions and reasons for year-on-year variations**

Data has been allocated between regulated and unregulated based on data contained with the Gentrack billing system and the general ledger. Revenue received from unregulated activities (including reuse and irrigation), and from Category 3 and 4 trade waste customers is not included in this calculation of forecast regulated revenue.

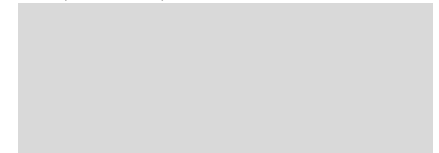
**Water**

	Actual 2013-14 \$'000	Budget 2014-15 \$'000	Forecast		
			2015-16 \$'000	2016-17 \$'000	2017-18 \$'000
Total Revenue	144,413.50	154,284.00	153,773.95	151,043.76	150,545.49
less: Unregulated Revenue	1,440.20	1,489.00	1,526.00	1,564.00	1,603.00
3rd party contributions - headworks	0.00	0.00	0.00	0.00	0.00
3rd party contributions - cash for reticulation assets	0.00	0.00	0.00	0.00	0.00
3rd party contributions - reticulation assets	4,481.00	3,778.00	3,873.00	3,970.00	4,070.00
3rd party contributions - Govt grants	0.00	0.00	0.00	0.00	0.00
3rd party contributions - service introduction charges	0.00	0.00	0.00	0.00	0.00
<b>Regulated Revenue</b>	<b>138,492.30</b>	<b>149,017.00</b>	<b>148,374.95</b>	<b>145,509.76</b>	<b>144,872.49</b>

**Sewerage**

	Actual 2013-14 \$'000	Budget 2014-15 \$'000	Forecast		
			2015-16 \$'000	2016-17 \$'000	2017-18 \$'000
Total Revenue	131,773.50	139,658.00	151,768.65	159,272.13	168,174.84
less: Unregulated Revenue	6,684.80	7,529.00	8,067.86	8,414.23	8,624.68
3rd party contributions - headworks	0.00	0.00	0.00	0.00	0.00
3rd party contributions - cash for reticulation assets	0.00	0.00	0.00	0.00	0.00
3rd party contributions - reticulation assets	4,481.00	3,778.00	3,872.00	3,969.00	4,068.00
3rd party contributions - Govt grants	0.00	0.00	0.00	0.00	0.00
3rd party contributions - service introduction charges	0.00	0.00	0.00	0.00	0.00
<b>Regulated Revenue</b>	<b>120,607.70</b>	<b>128,351.00</b>	<b>139,828.79</b>	<b>146,888.90</b>	<b>155,482.16</b>

Check (must sum to zero)



Check (must sum to zero)



These are the revenue values that will be used during the second regulatory period.

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**Customer Impact**

**Proposed Price Constraints**

**Water  
Fixed Charge**

Forecast				
2015-16 %	2016-17 %	2017-18 %	2018-19 %	2019-20 %
94.50	94.50	0.00	0.00	0.00
0.20	2.50	3.40	98.30	98.90
2.30	0.90	94.90	0.60	1.10
3.00	2.10	1.70	1.10	0.00
<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

Nominal 2014/15				
\$'000	\$'000	\$'000	\$'000	\$'000
26,932.99	34,549.31	35,712.26	31,771.46	29,666.19

**Water  
Variable Charge**

Forecast				
2015-16 %	2016-17 %	2017-18 %	2018-19 %	2019-20 %
0.30	0.30	0.00	0.00	0.00
76.70	76.70	76.70	100.00	100.00
0.00	0.00	23.30	0.00	0.00
23.00	23.00	0.00	0.00	0.00
<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

**Sewerage**

Forecast				
2015-16 %	2016-17 %	2017-18 %	2018-19 %	2019-20 %
13.00	13.00	0.00	0.00	0.00
1.10	61.10	70.00	88.70	92.70
60.00	8.90	18.70	4.00	7.30
25.90	17.00	11.30	7.30	0.00
<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

Nominal 2014/15				
\$'000	\$'000	\$'000	\$'000	\$'000

Percentage of customers above target tariff  
 Percentage of customers on target tariff  
 Percentage of customers reaching target tariff after price constraint applied  
 Percentage of customers not reaching target tariff after price constraint applied

Net profit after tax income tax equivalents expense

