

# NEW CUSTOMER CONTRIBUTION FRAMEWORK

December 2012



# **TABLE OF CONTENTS**

3.0       NCC Model       5         3.1       General       5         3.2       Key Variables       5         3.3       Model Period       6         4.0       Water NCC       6         4.1       Incremental Capital Expenditure       6         4.2       Gifted Assets       9         4.3       Incremental Revenue       9         4.4       Incremental Revenue       9         4.5       Calculated Charge       10         4.6       Discussion       11         5.0       Wastewater NCC       12         5.1       Incremental Capital Expenditure       12         5.1       Incremental Revenue       14         5.3       Incremental Revenue       14         5.4       Incremental Revenue       14         5.5       Calculated Charge       16         5.6       Discussion       16         6.0       Proposed NCC Charge       16         6.1       Proposed Charges       16         6.2       Water Plan 3 Pricing Impact       17         6.3       Transition Period       17         7.0       Developer Consultation       17 <th>EXEC</th> <th>UTIVE SUMMARY</th> <th>3</th>	EXEC	UTIVE SUMMARY	3
2.0       Pricing Principles       4         3.0       NCC Model       5         3.1       General       5         3.2       Key Variables       5         3.3       Model Period       6         4.0       Water NCC       6         4.1       Incremental Capital Expenditure       6         4.2       Gifted Assets       9         4.3       Incremental Revenue       9         4.4       Incremental Revenue       9         4.5       Calculated Charge       10         4.6       Discussion       11         5.0       Wastewater NCC       12         5.1       Incremental Capital Expenditure       12         5.2       Gifted Assets       14         5.3       Incremental Revenue       14         5.4       Incremental Revenue       14         5.5       Calculated Charge       16         5.6       Discussion       16         6.0       Proposed NCC Charge       16         6.1       Proposed Charges       16         6.2       Water Plan 3 Pricing Impact       17         6.3       Transition Period       17	1.0	Background	4
3.0       NCC Model       5         3.1       General       5         3.2       Key Variables       5         3.3       Model Period       6         4.0       Water NCC       6         4.1       Incremental Capital Expenditure       6         4.2       Gifted Assets       9         4.3       Incremental Revenue       9         4.4       Incremental Revenue       9         4.5       Calculated Charge       10         4.6       Discussion       11         5.0       Wastewater NCC       12         5.1       Incremental Capital Expenditure       12         5.2       Gifted Assets       14         5.3       Incremental Revenue       14         5.4       Incremental Revenue       14         5.5       Calculated Charge       16         5.6       Discussion       16         6.0       Proposed NCC Charge       16         6.1       Proposed Charges       16         6.2       Water Plan 3 Pricing Impact       17         6.3       Transition Period       17         7.0       Developer Consultation       17	2.0	_	
4.1       Incremental Capital Expenditure       6         4.2       Gifted Assets       9         4.3       Incremental Revenue       9         4.4       Incremental O&M       10         4.5       Calculated Charge       10         4.6       Discussion       11         5.0       Wastewater NCC       12         5.1       Incremental Capital Expenditure       12         5.2       Gifted Assets       14         5.3       Incremental Revenue       14         5.4       Incremental O&M       15         5.5       Calculated Charge       16         5.6       Discussion       16         6.0       Proposed NCC Charge       16         6.1       Proposed Charges       16         6.2       Water Plan 3 Pricing Impact       17         6.3       Transition Period       17         7.0       Developer Consultation       17         8.0       Negotiating Framework       18         9.0       Framework Implementation Timeframe       18         Appendix 1 - Water Connections Forecast       19         Appendix 3 - New Operating Costs - Water       23         Appendix 4 -	3.0 3.1 3.2	NCC Model	<b>5</b> 5
5.0       Wastewater NCC       12         5.1       Incremental Capital Expenditure       12         5.2       Gifted Assets       14         5.3       Incremental Revenue       14         5.4       Incremental O&M       15         5.5       Calculated Charge       16         5.6       Discussion       16         6.0       Proposed NCC Charge       16         6.1       Proposed Charges       16         6.2       Water Plan 3 Pricing Impact       17         6.3       Transition Period       17         7.0       Developer Consultation       17         8.0       Negotiating Framework       18         9.0       Framework Implementation Timeframe       18         Appendix 1 – Water Connections Forecast       19         Appendix 2 – Average Water Demand       21         Appendix 3 – New Operating Costs - Water       23         Appendix 4 – Wastewater Connections Forecast       24         Appendix 5 – Average Wastewater Discharge Volume       26	4.2 4.3 4.4 4.5	Incremental Capital Expenditure Gifted Assets Incremental Revenue Incremental O&M Calculated Charge	6 9 10
5.5 Calculated Charge	5.0 5.1 5.2 5.3	Wastewater NCC Incremental Capital Expenditure Gifted Assets Incremental Revenue	
6.1 Proposed Charges	5.5 5.6	Calculated Charge Discussion	16 16
8.0 Negotiating Framework	6.1 6.2	Proposed Charges	16 17
9.0 Framework Implementation Timeframe	7.0	Developer Consultation	17
9.0 Framework Implementation Timeframe	8.0	Negotiating Framework	18
Appendix 2 – Average Water Demand	9.0		
Appendix 3 – New Operating Costs - Water23  Appendix 4 – Wastewater Connections Forecast24  Appendix 5 – Average Wastewater Discharge Volume26			
Appendix 4 – Wastewater Connections Forecast24 Appendix 5 – Average Wastewater Discharge Volume26		_	
Appendix 5 – Average Wastewater Discharge Volume26			
Annondiy 6 Now Operating Costs Westswater 27			
Appendix 6 – New Operating Costs - Wastewater27  Appendix 7 – Negotiating Framework28		· -	



# **EXECUTIVE SUMMARY**

A New Customer Contribution (NCC) is levied when new connections are made to the water and wastewater networks managed by Goulburn Valley Water. Currently NCC are set at uniform levels across Victoria.

A new principle-based NCC framework is to commence on 1 July 2013 coinciding with the commencement of the Water Plan 3 regulatory period. The new framework will enable each Water Corporation to establish NCC charges in accordance with the pricing principles that have been established in a Guidance Paper issued by the ESC.

To provide an equitable NCC charge across the Goulburn Valley Water service region it is proposed to adopt a standard charge across all towns. Modelling has been undertaken on the basis of a standard charge across all towns. The proposed NCC charge for the Water Plan 3 period for Goulburn Valley Water is \$2,323 per new connection.

This charge will apply for all new connections that receive water services. The charge has been determined based on a methodology that is consistent with the pricing principles from the Guidance Paper.

Goulburn Valley Water reserves the right to apply a different charge should unforeseen exceptional circumstances arise requiring high growth capital expenditure to be incurred by Goulburn Valley Water for an unforeseen new development or event. The charge will be calculated in accordance with the new principles based methodology and could apply to water or sewer,

The proposed NCC charge of \$2,323 per new connection is similar to the existing charge of \$2,434.60 for the majority of new connections. The revenue to be generated from the new NCC charge will not be materially different to the existing charge. Goulburn Valley Water does not propose to vary the revenue forecast from NCC charges currently included in Water Plan 3.

A negotiating framework has been developed for the implementation of NCC charges in accordance with the Guidance Paper.

The negotiating framework sets out procedural and information requirements relevant to services to which developer charges apply, as defined in the Water Industry Regulatory Order. It requires Goulburn Valley Water and connection applicants to negotiate in good faith to agree the price, standards and conditions of services to be provided. It also provides for transparent information to enable the connection applicant to understand the reasons for decisions made by Goulburn Valley Water.

A number of key issues covered in the negotiating framework include:

- Pricing principles.
- Definitions for reticulation assets.
- Bring forward charges.
- Benefitting Owners.
- Non Standard Charges
- Timeframes for development applications to be assessed.



# 1.0 Background

A New Customer Contribution (NCC) is levied when new connections are made to the water and sewer networks managed by Goulburn Valley Water.

Currently NCC are set at uniform levels across Victoria which are shown in the following Table.

Table 1 - Existing NCC

Lot Size	Existing NCC
Category 1 lot size <450m2	\$608.60
Category 2 lot size 450-1,350m2	\$1,217.30
Category 3 lot size > 1,350m2	\$2,434.60

The NCC is applied to both water and sewer connections. For example the existing NCC for a new 700m<sup>2</sup> lot that receives both water and sewer services would be \$2434.60 (\$1,217.30 for both water and sewer).

A new principle-based NCC framework is to commence on 1 July 2013 coinciding with the commencement of the Water Plan 3 regulatory period.

The new framework will enable each Water Corporation to establish NCC charges in accordance with the pricing principles

A NCC Guidance Paper was issued by the Essential Services Commission (ESC) in August 2012.

# 2.0 Pricing Principles

The Guidance paper establishes minimum pricing principles that will govern the calculation of standard NCC charges.

The pricing principles are as follows.

#### NCC must:

- i. have regard to the incremental infrastructure and associated costs in one or more of the statutory cost categories attributable to a given connection
- ii. have regard to the incremental future revenues that will be earned from customers at that connection
- iii. be greater than the avoidable cost of that connection and less than the standalone cost of that connection.



# 3.0 NCC Model

# 3.1 General

A spreadsheet model has been provided by the ESC for calculating NCC charges. The spreadsheet model incorporates incremental costs and revenues and calculates an NCC charge per property.

Separate model calculations are completed to determine water and wastewater charges.

# 3.2 Key Variables

A number of key variables for input to the model are common for both the water and wastewater NCC modeling.

Table 2 - Key Variables

Variable	Value	Comments
Pipes & Civil Assets - Asset	60 years	Provision is included in the model for
Life		other asset types. For the purpose of
Pumps & Mechanical /	25 years	the NCC modelling, Goulburn Valley
Electrical Assets - Asset Life		Water has not used other asset types
		such as valves and meters as they
		represent only a small proportion of
		total costs for assets. A Non
		Depreciating asset type has been used
		for land acquisition costs.
Inflation	2.00%	Default value contained in the model.
Post Tax Nominal Discount	7.00%	Default value contained in the model.
Factor		
Value of Franking Credits (as a	50%	Default value contained in the model.
Proportion of Face Value)		
Corporate Tax Rate	30% - 2013/14	Default value contained in the model.
	29% - 2014/15	
	28% - 2015/16 and	
	future years	



### 3.3 Model Period

The spreadsheet model contains three separate time periods for analysis which are 20 years, 30 years and 35 years.

The Guidance Paper has identified that the 30 year model is to be used for establishing the NCC charge.

The 30 year model has been used by Goulburn Valley Water.

# 4.0 Water NCC

The Goulburn Valley Water service area covers 54 towns which are serviced by 37 separate water supply systems. It is not practical to undertake NCC modelling for each individual development area within towns.

The majority of development areas within Goulburn Valley Water towns are developed over an extended time period (can be greater than 20 years). A number of assets constructed in the past 15 years are continuing to provide capacity to service new development. The Guidance Paper allows costs from the Water Plan 2 period (2008 – 2013) to be recovered from future NCC charges but does not make provision for costs prior to 2007/2008 to be recovered.

The calculation of NCC charges on an individual town basis is likely to result in major differences in charges across the Goulburn Valley Water service area. There is likely to be inequity in charges across towns depending on the timing of incremental capital costs associated with growth. For example, a town which received growth assets prior to Water Plan 2 is likely to have a lower NCC charge than a town that will require future growth assets.

To provide an equitable NCC charge across the Goulburn Valley Water service region it is proposed to adopt a standard charge across all towns. Modelling has been undertaken on the basis of a standard charge across all towns. The key model inputs are outlined in the following sections.

# 4.1 Incremental Capital Expenditure

# Water Plan 2 & 3 Expenditure

Capital expenditure for water growth projects from the Water Plan 2 and 3 periods has been included in the first year of the NCC calculation.

The proportion of the original capital cost that is recoverable from future NCC charges has been determined based on:

- The current remaining life of the asset.
- The percentage of the asset that related to growth.
- The spare capacity currently remaining within the asset.



A comparison between the original capital cost of growth projects and the recoverable amount used in the NCC calculation is shown in the following table.

Table 3 - Recoverable Value of Water Plan 2 & 3 - Water Growth Projects

Business Plan Number	Asset	Construction Cost (\$)	Current Value to be				
			Recovered (\$)				
1707	Alexandra - Alexandra to Eildon Pipeline	\$9,037,000	\$3,097,499				
1025	Alexandra - WTP	\$3,129,000	\$480,370				
2122	All Areas - Small Town Filtration Plants	\$5,000,000	\$1,517,416				
1843	Bonnie Doon - WTP Filtration	\$3,417,000	\$1,330,219				
1810	Broadford - Goulburn River to Broadford & Kilmore Pipeline	\$13,306,000	\$4,523,770				
1811	Cobram - Water Network Augmentation	\$944,000	\$130,477				
1815	Girgarre - WTP Filtration	\$629,000	\$218,177				
1507	Kyabram - Raw Water Storage Construction	\$1,140,000	\$299,427				
1822	Mansfield - Additional Raw Water Storage	\$2,522,000	\$690,739				
1912	Numurkah - Clear Water Storage Upgrade	\$1,425,000	\$883,336				
1322	Numurkah - High Lift Pumps	\$513,000	\$54,166				
1826	Numurkah - Raw Water Storage	\$4,300,000	\$748,207				
1021	Sawmill Settlement - WTP	\$2,331,000	\$175,678				
1850	Tatura - Additional Treated Water Storage	\$1,612,000 \$791					
1841	Tongala - WTP Filter Replacement	\$2,136,000	\$957,862				
	Total	\$51,441,000	\$15,899,154				

# **Future Capital Expenditure**

Future capital expenditure for water growth projects is based on the current 20 year capital works program.

Future capital works projects related to growth are shown in the following table.

Table 4 - Future Capital Expenditure - Water

% of Asset Related to Growth	Project Description	Total Capital Cost (\$)
50%	2009 - Alexandra - Water Network Augmentation - Stage 1	\$180,000
100%	2343 - Alexandra - Clear Water Storage Augmentation	\$445,000
50%	2348 - Alexandra - Water Network Augmentation - Stage 2	\$1,360,000
100%	1911 - Broadford - Broadford to Kilmore Pipeline	\$15,680,000
100%	2304 - Broadford - WTP Upgrade	\$7,660,000
100%	1384 - Cobram - WTP Augmentation - Stage 2	\$5,730,000



% of Asset Related to Growth	Project Description	Total Capital Cost (\$)
100%	2338 - Euroa - Clear Water Storage Augmentation	\$1,420,000
100%	1817 - Kilmore - Green Street WPS Upgrade	\$545,000
100%	1818 - Kilmore - Water Network Augmentation	\$730,000
100%	2326 - Kilmore - North Tank Land Acquisition	\$430,000
100%	1819 - Kyabram - High Lift Water Pump Station Upgrade	\$940,000
100%	2124 - Kyabram - Albion Street Water Main Augmentation	\$170,000
100%	1821 - Mansfield - WTP Upgrade	\$2,740,000
100%	2003 - Mansfield - Water Network Augmentation - Stage 1	\$260,000
100%	2349 - Mansfield - Water Network Augmentation - Stage 2	\$720,000
29%	1823 - Marysville - Disinfection Upgrade	\$5,500,000
100%	2217 - Mooroopna - McLennan Street Pump Station Upgrade	\$1,695,000
100%	2218 - Mooroopna - DN300 Distribution Main to Mooroopna West Growth Corridor	\$785,000
100%	2220 - Mooroopna - Echuca Road Pump Station Upgrade	\$870,000
100%	2223 - Mooroopna - McLennan Street Water Main Augmentation	\$1,635,000
85%	2126 - Nagambie - Clear Water Storage Upgrade	\$2,020,000
100%	2230 - Nagambie - WTP Capacity Upgrade	\$1,380,000
28%	1825 - Numurkah - WTP Upgrade	\$9,100,000
100%	2245 - Numurkah - Exhibition Street & Tunnock Road Water Main Augmentations	\$255,000
100%	1226 - Shepparton - WTP Capacity Upgrade	\$17,190,000
100%	1403 - Shepparton - Old Dookie Road Water Main	\$905,000
100%	1833 - Shepparton - DN375 Direct Feed Water Main to South Tank	\$3,900,000
100%	1834 - Shepparton - DN450 Trunk Water Main South of Kialla Lakes Drive	\$1,125,000
100%	1835 - Shepparton - DN375 Water Main South of Raftery Road	\$1,620,000
100%	2216 - Shepparton - Shepparton South Tank Pump Station Upgrade	\$1,525,000
100%	2219 - Shepparton - Shepparton South Dedicated Pump Station	\$840,000
100%	2221 - Shepparton - Lemnos Pump Station Upgrade	\$1,855,000
100%	2222 - Shepparton - Poplar Avenue Water Main Augmentation	\$725,000
100%	2334 - Shepparton - Raw Water Pump Station Augmentation	\$5,640,000
100%	2344 - Shepparton - Clear Water Storage Augmentation	\$3,175,000
100%	1854 - Tatura - WTP Capacity Upgrade	\$6,500,000
100%	2335 - Tatura - Additional Raw Water Storage	\$1,370,000
100%	2319 - Yea - East Street Water Main Augmentation	\$80,000
	Total	\$108,700,000

In addition to the individual projects identified in the previous table, Goulburn Valley Water has an annual budget of \$600,000 for shared water assets (growth projects for



which costs are shared between Goulburn Valley Water and developers). The shared assets budget has been included in the model.

The 20 year capital works program does not cover the entire 30 year modelling period for the NCC calculation. For years 21 – 30, the average yearly incremental expenditure for the next 20 years (\$5.1M per year) has been assumed to continue.

A number of pump and mechanical / electrical assets (25 year life) will require replacement within the 30 year modelling period. A replacement schedule has been included in the modelling for these assets.

#### 4.2 Gifted Assets

Gifted assets are constructed and funded by developers to service new development. Based on historical levels of gifted assets an amount of \$1.7M has been included per year in the modelling.

#### 4.3 Incremental Revenue

Incremental revenue is calculated in the NCC model based on the number of new connections, yearly water consumption for new connections, fixed tariff rates and variable tariff rates.

# **New Connection Numbers**

A 50 year forecast for new water connections was developed for the 2012 Water Supply Demand Strategy (WSDS). This forecast has been used for the NCC modelling.

A summary of new connection numbers for the each town is included in Appendix 1.

## **New Connection Water Volumes**

The yearly water volume for new connections used in the modelling is based on the forecast average volume per new connection for 2013/14 from the WSDS demand forecast.

The yearly volume applied for new residential connections is 201KL.

The yearly volume applied for new non-residential connections is 568KL.

A summary of the yearly volume calculations is located in Appendix 2.



#### **Fixed Tariff**

The fixed water tariff for 2012/2013 is \$155.47. There are no proposed real price increases to the fixed tariff for the Water Plan 3 period. For the Water Plan 4 period (2018 -2023) a 1.7% real price increase per year is currently forecast.

The fixed water tariff for Year 1 (2013/14) of the NCC model is \$158.58 (\$155.47 plus inflation of 2%). Inflation is applied yearly in the model from 2013/14 and a real price increase of 1.7% is also applied for each year of the Water Plan 4 period.

# Variable Tariff

The variable water tariff for 2012/13 is \$1.06/kL. There are proposed real price increases to the variable water tariff per year of 2.4% for the Water Plan 3 period and 1.7% for the Water Plan 4 period.

The variable water tariff for Year 1 (2013/14) of the NCC model is \$1.11/kL (\$1.06 plus inflation of 2% and a real price increase of 2.4%). Inflation is applied yearly in the model from 2013/14 and a real price increase is also applied for each year of the Water Plan 3 and 4 periods.

#### 4.4 Incremental O&M

Incremental operations and maintenance costs include two components.

The first component relates to the delivery of additional water to service growth. The average cost for the production and distribution of water across Goulburn Valley Water is \$210/ML. This cost has been applied to additional water to service new connections.

The second component relates to consequential operating costs from new capital works projects. The consequential operating costs have been calculated on an individual project basis. A summary of the consequential operating costs from new capital works projects are included in Appendix 3.

# 4.5 Calculated Charge

The incremental costs and revenues identified in Sections 4.1 - 4.4 have been entered into the 30 year NCC model.

The calculated NCC charge is \$2,323 per new connection.

Goulburn Valley Water reserves the right to apply a different charge should unforeseen exceptional circumstances arise requiring high growth capital expenditure to be incurred by Goulburn Valley Water for an unforeseen new development or event. The charge will be calculated in accordance with the new principles based methodology.



### 4.6 Discussion

For comparison purposes separate modelling has also been undertaken on an individual town basis to test the assumption that inequity would exist between towns depending on the timing of the construction of growth assets.

The calculated NCC for a selection of towns is shown below.

Table 5 - Water NCC Calculation for Selected Towns

Town	Calculated Water NCC	Comments
Broadford & Kilmore	\$3,391	Major growth project constructed in the Water Plan 2 period.
Cobram	\$0	Major growth project which continues to provide capacity for new connections constructed prior to Water Plan 2.
Kyabram	\$0	Major growth project which continues to provide capacity for new connections constructed prior to Water Plan 2.
Numurkah	\$9,471	Major growth projects over the Water plan 2 and 3 periods.
Shepparton & Mooroopna	\$600	Major growth project in the Water Plan 3 period.

The NCC calculation analysis for the selection of towns has confirmed inequity between towns would exist if NCC charges are calculated on an individual town basis. This inequity is particularly apparent when comparing towns which received growth projects prior to Water Plan 2 to towns that require growth projects in the Water Plan 2 and 3 periods.

The analysis has confirmed that the standard charge approach remains the most appropriate NCC calculation methodology for Goulburn Valley Water to avoid inequity in charges between towns.

The methodology used to generate the standard charge is consistent with the pricing principles from the Guidance Paper.



# 5.0 Wastewater NCC

Modelling of wastewater NCC charges has been undertaken on the basis that a standard charge for all towns will apply

# 5.1 Incremental Capital Expenditure

# Water Plan 2 & 3 Expenditure

Capital expenditure for wastewater growth projects from the Water Plan 2 and 3 periods has been included in the first year of the NCC calculation.

The proportion of the original capital cost that is recoverable from future NCC charges has been determined based on:

- The current remaining life of the asset.
- The percentage of the asset that related to growth.
- The spare capacity currently remaining within the asset.

A comparison between the original capital cost of growth projects and the recoverable amount used in the NCC calculation is shown in the following table.

Table 6 - Recoverable Value of Water Plan 2 & 3 - Wastewater Growth Projects

Business Plan Number	Asset	Construction Cost (\$)	Current Value to be Recovered (\$)
2311	Shepparton - Doyles Road Sewerage Reticulation Extension	\$230,000	\$226,167
2346	Shepparton - Northside Estate Sewer Distribution Assets	\$960,000	\$939,130
	Total	\$1,190,000	\$1,165,297

# **Future Capital Expenditure**

Future capital expenditure for wastewater growth projects is based on the current 20 year capital works program.

Future capital works projects related to growth are shown in the following table.



Table 7 - Future Capital Expenditure - Wastewater

% of Asset Related to Growth	Project Description	Total Capital Cost (\$)
100%	1903 - Broadford - WMF Reuse Capacity Upgrade	\$1,670,000
100%	1813 - Euroa - WMF Reuse Capacity Upgrade	\$440,000
100%	1901 - Kilmore - WMF Additional Winter Storage	\$4,480,000
50%	2305 - Kilmore - Sewer Network Augmentation	\$1,600,000
100%	2321 - Kilmore - WMF Additional Reuse Area	\$1,060,000
100%	1902 - Mansfield - WMF Additional Winter Storage	\$6,050,000
100%	2312 - Mansfield - Sewage Pump Station No.2 Upgrade	\$215,000
100%	2322 - Mansfield - WMF Additional Reuse Area	\$720,000
100%	2309 - Marysville - WMF Reuse Capacity Upgrade	\$265,000
100%	1502 - Mooroopna - WMF HRAL Upgrade	\$910,000
100%	2235 - Mooroopna - WMF Reuse Capacity Upgrade	\$755,000
100%	1904 - Nagambie - WMF Reuse Capacity Upgrade	\$415,000
100%	2206 - Nagambie - SPS02 Upgrade	\$105,000
100%	2224 - Nagambie - SPS04 Upgrade	\$280,000
100%	2225 - Nagambie - SPS09 Additional Storage	\$195,000
50%	2226 - Nagambie - SPS04 Rising Main Replacement	\$2,420,000
100%	2123 - Sawmill Settlement - WMF Reuse Capacity Upgrade - Stage 2	\$100,000
50%	2211 - Seymour - SPS01 Rising Main Replacement	\$3,705,000
100%	1609 - Shepparton - WMF HRAL Additional Aerators & Mixers	\$1,260,000
100%	1837 - Shepparton - Kialla Lakes South Sewer Pump Station	\$440,000
100%	1838 - Shepparton - Kialla Lakes South Sewer Pump Station Rising Main Stages 1 & 2	\$675,000
100%	1839 - Shepparton - SPS54 Pump Station & Rising Main Upgrades	\$945,000
100%	2008 - Shepparton - WMF Reuse Capacity Upgrade	\$3,100,000
100%	2213 - Shepparton - SPS44 Upgrade	\$310,000
100%	2324 - Shepparton - Kialla Lakes South SPS Rising Main Stage 3	\$325,000
100%	2325 - Shepparton - Kialla Lakes South SPS Rising Main Stage 4	\$1,385,000
100%	1389 - Tatura - WMF Augmentation	\$3,288,000
100%	1606 - Tatura - Additional Offsite Reusers	\$1,180,000
100%	1709 - Tatura - Additional WMF Winter Storage (Stage 2)	\$1,600,000
50%	2306 - Wandong - Sewer Network Augmentation	\$810,000
100%	Kilmore WMF Upgrade*	\$26,000,000
	Total	\$66,703,000



\*Note that the Kilmore WMF Upgrade project has been identified at a master planning level but has not been added to the GVW 20 year capital works program at this point. The project has been included in the NCC modelling on the basis that it will be added to the capital works program in future. The project has been scheduled for 2026/27 in the modelling.

In addition to the individual projects identified above, Goulburn Valley Water has an annual budget of \$600,000 for shared wastewater assets (growth projects for which costs are shared between Goulburn Valley Water and developers). The shared assets budget has been included in the model.

The 20 year capital works program does not cover the entire 30 year modelling period for the NCC calculation. For years 21 – 30, the average yearly incremental expenditure for the next 20 years (\$3.1M per year) has been assumed to continue.

A number of pump and mechanical / electrical assets (25 year life) will require replacement within the 30 year modelling period. A replacement schedule has been included in the modelling for these assets.

## 5.2 Gifted Assets

Gifted assets are constructed and funded by developers to service new development. Based on historical levels of gifted assets an amount of \$2.9M has been included per year in the modelling.

## 5.3 Incremental Revenue

Incremental revenue is calculated in the NCC model based on the number of new connections, sewer discharge volume for new non residential connections, fixed tariff rates and variable tariff rates.

# **New Connection Numbers**

A 50 year forecast for new wastewater connections was developed for the preparation of Water Plan 3. This forecast has been used for the NCC modelling.

A summary of new connection numbers for the each town is included in Appendix 4.

## New Non Residential Connection Wastewater Volumes

Non residential wastewater customers are charged based on a fixed and a variable tariff. Volumes for the variable charge are calculated based on water usage and a sewer discharge factor. An allowance of 180kL is deducted from the calculated volume and the variable tariff is only applied to the remaining volume.



The yearly wastewater discharge volume for new connections used in the modelling is based on the forecast average volume per new connection for 2013/14 from the wastewater demand forecast.

The average yearly wastewater discharge volume applied for new non residential connections is 339kL.

The average yearly volume for new non-residential connections that is subject to variable charges is 159KL (339kL less 180kL).

A summary of the yearly wastewater discharge volume calculations is located in Appendix 5.

#### Fixed Tariff

The fixed wastewater tariff for 2012/2013 is \$414.91. There are proposed real price increases to the fixed tariff per year of 3.4% for the Water Plan 3 period. For the Water Plan 4 period (2018 -2023) a 1.7% real price increase per year is currently forecast.

The fixed water tariff for Year 1 (2013/14) of the NCC model is \$437.60 (\$414.91 plus real price increase of 3.4% and inflation of 2%). Inflation is applied yearly in the model from 2013/14 and a real price increase is also applied for each year of the Water Plan 3 and 4 periods.

# Variable Tariff

The variable wastewater tariff for 2012/13 is \$1.45/kL. There are proposed real price increases to the variable wastewater tariff per year of 3.4% for the Water Plan 3 period and 1.7% for the Water Plan 4 period.

The variable wastewater tariff for Year 1 (2013/14) of the NCC model is \$1.53/KL (\$1.45 plus inflation of 2% and a real price increase of 3.4%). Inflation is applied yearly in the model from 2013/14 and a real price increase is also applied for each year of the Water Plan 3 and 4 periods.

## 5.4 Incremental O&M

Incremental operations and maintenance costs include two components.

The first component relates to the collection and treatment of additional wastewater to service growth. The average cost for the collection and treatment of wastewater across Goulburn Valley Water is \$260/ML. This cost has been applied to additional wastewater to service new connections.

The second component relates to consequential operating costs from new capital works projects. The consequential operating costs have been calculated on an individual project basis. A summary of the consequential operating costs from new capital works projects is included in Appendix 6.



# 5.5 Calculated Charge

The incremental costs and revenues identified in Sections 5.1 – 5.4 have been entered into the 30 year NCC model.

The calculated revenues exceed the costs and an NCC charge cannot be generated from the model.

Based on the model outputs an NCC charge for wastewater will not apply for Goulburn Valley Water.

Goulburn Valley Water however reserves the right to apply a charge should unforeseen exceptional circumstances arise requiring high growth capital expenditure to be incurred by Goulburn Valley Water for an unforeseen new development or event. The charge will be calculated in accordance with the new principles based methodology.

## 5.6 Discussion

Goulburn Valley Water completed a number of major wastewater infrastructure investments prior to Water Plan 2 which are continuing to provide capacity for new connections.

The NCC model does not enable continued recovery of costs made from investments prior to Water Plan 2.

The outcome for wastewater charges from the model is reflective of Goulburn Valley Water wastewater systems currently containing spare capacity from past investments.

# 6.0 Proposed NCC Charge

# 6.1 Proposed Charges

A standard charge will apply for all new connections across the Goulburn Valley Water region. The proposed NCC charge for the Water Plan 3 period for Goulburn Valley Water is \$2,323 per new connection.

This charge will apply for all new connections that receive water services. The charge has been determined based on a methodology that is consistent with the pricing principles from the Guidance Paper.

A charge will not apply for new connections (in existing serviced towns) that receive wastewater services only.



Goulburn Valley Water reserves the right to apply a different charge should unforeseen exceptional circumstances arise requiring high growth capital expenditure to be incurred by Goulburn Valley Water for an unforeseen new development or event. The charge will be calculated in accordance with the new principles based methodology and could apply to water or sewer,

# 6.2 Water Plan 3 Pricing Impact

The majority of new connections in the Goulburn Valley region are in the Category 2 lot size range of 450 – 1,350m2.

The current NCC charge for Category 2 lot sizes is \$1,217.30 for both water and wastewater (\$2,434.60 total).

The proposed NCC charge of \$2,323 per new connection is similar to the existing charge of \$2,434.60 for the majority of new connections.

The revenue to be generated from the new NCC charge will not be materially different to the existing charge.

Goulburn Valley Water does not propose to vary the revenue forecast from NCC charges currently included in Water Plan 3.

## 6.3 Transition Period

The proposed NCC charge will result in a small reduction in charges in comparison to the current NCC charge.

On the basis that developers will not be disadvantaged by the introduction of the new charge, it is proposed that the new charge will apply from 01 July 2013 with no transition period.

# 7.0 Developer Consultation

Developer consultation forums were held in Shepparton on 13 November 2012 and Seymour on 14 November 2012.

The meetings were attended by approximately 20 representatives from the development industry.

The methodology for determining new NCC charges was discussed and the proposed charges and negotiating framework were presented.

No issues were raised in relation to the proposed charge or negotiating framework.



# 8.0 Negotiating Framework

A negotiating framework has been developed for the implementation of NCC charges in accordance with the Guidance Paper.

The negotiating framework sets out procedural and information requirements relevant to services to which developer charges apply, as defined in the Water Industry Regulatory Order. It requires Goulburn Valley Water and connection applicants to negotiate in good faith to agree the price, standards and conditions of services to be provided. It also provides for transparent information to enable the connection applicant to understand the reasons for decisions made by Goulburn Valley Water.

A number of key issues covered in the negotiating framework include:

- Pricing principles.
- · Definitions for reticulation assets.
- Bring forward charges.
- Benefitting Owners.
- Non Standard Charges
- Timeframes for development applications to be assessed.

A copy of the negotiating framework is included in Appendix 7.

# 9.0 Framework Implementation Timeframe

The NCC framework will be submitted to the ESC in early December 2012.

A draft decision on NCC for the Water Plan 3 period is scheduled to be released by the ESC in February 2013 for final consultation.

A final decision on NCC for the Water Plan 3 period is scheduled to be released by the ESC in May 2013.



# Appendix 1 – Water Connections Forecast

# Water - Residential Connections Forecast

Towns	2010	0-11 20	011-12 2	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25 2	2025-26	2026-27	2027-28	2028-29	2029-30 2	2030-31	2031-32	2032-33	2033-34 2	2034-35	2035-36	2036-37
Alexandra		1166	1183	1200	1217	1234	1252	1270	1288	1309	1331	1354	1377	1401	1426	1451	1476	1502	1529	1556	1583	1611	1639	1668	1698	1728	1758	1789
Avenel	-	372	379	385	391	398	405	412	419	426	433	441	448	456	464	472	480	488	497	505	514	523	532	541	551	560	570	580
Barmah		136	137	138	140	141	142	143	144	145	146	147	148	149	149	150	151	152	153	154	155	156	157	158	159	160	160	
Baxters Road (Goulburn Weir)		12	12	12	12	12	12	143	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Bonnie Doon		211	212	213	214	215	215	216	217	218	219	220	220	221	222	223	223	224	225	226	226	227	228	229	229	230	231	232
Broadford, Clonbinane	,	1654	1688	1722	1757	1789	1822	1856	1890	1922	1954	1987	2020	2050	2080	2110	2141	2173	2205	2237	2270	2303	2337	2371	2406	2442	2477	2514
Cobram, Yarroweyah		2345	2381	2419	2456	2491	2527	2563	2600	2635	2671	2708	2745	2780	2816	2853	2890	2927	2965	3003	3042	3082	3122	3162	3203	3244	3286	3329
Colbinabbin	4	68	68	69	69	70	70	71	71	72	72	73	73	74	74	75	76	76	77	77	78	78	79	79	80	81	81	82
Corop		28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	
Dookie		133	133	134	134	135	136	136	137	138	139	140	141	142	142	143	144	145	146	147	147	148	149	150	151	152	153	154
Eildon		568	572	577	582	587	591	596	601	608	614	621	628	635	642	650	657	665	673	681	688	696	705	713	721	729	738	
Euroa		1551	1564	1577	1591	1604	1618	1631	1645	1659	1674	1688	1703	1718	1733	1748	1764	1779	1795	1811	1827	1843	1859	1876	1892	1909	1926	1943
Girgarre	-	109	109	110	110	111	111	111	112	112	113	113	113	113	113	113	113	113	113	113	113	114	114	114	114	114	114	114
Katamatite		109	109	110	111	111	112	113	113	114	114	115	115	116	116	117	117	118	118	119	119	120	120	120	121	121	122	122
Katandra West		99	100	100	101	102	103	104	106	107	108	109	110	111	113	114	115	116	117	118	120	121	122	123	125	126	127	129
Katunga		75	76	77	78	79	80	80	81	82	83	84	85	86	87	87	88	89	90	91	92	93	94	95	96	97	98	
Kilmore		2339	2441	2547	2657	2767	2881	3001	3125	3249	3378	3513	3652	3790	3933	4081	4235	4395	4560	4732	4910	5095	5287	5487	5693	5908	6131	6362
Kirwans Bridge		33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	
Kyabram	2	2709	2735	2761	2787	2811	2834	2858	2882	2903	2924	2946	2967	2982	2996	3011	3025	3040	3054	3069	3084	3099	3114	3129	3144	3159	3175	
Longwood		110	111	111	112	112	112	113	113	113	114	114	115	115	116	116	117	117	117	118	118	119	119	120	120	121	121	121
Mansfield		1614	1647	1681	1716	1750	1785	1820	1857	1893	1931	1969	2007	2046	2086	2126	2167	2209	2252	2296	2340	2385	2432	2479	2527	2575	2625	2676
Marysville, Buxton		373	398	424	453	487	523	562	604	608	612	617	621	626	630	635	640	645	650	655	660	665	670	675	680	685	690	696
Merrigum		195	196	197	198	199	199	200	201	201	202	202	203	204	204	205	205	206	206	207	207	208	209	209	210	210	211	211
Molesworth		14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
Mooroopna, Toolamba	3	3505	3555	3606	3657	3703	3750	3797	3845	3888	3932	3977	4022	4063	4104	4146	4189	4231	4275	4318	4362	4407	4452	4497	4543	4590	4636	4684
Murchison		375	378	380	382	384	386	387	389	391	392	394	395	397	398	399	401	402	404	405	407	408	410	411	413	414	416	417
Nagambie		758	777	796	815	835	855	876	898	920	943	966	990	1014	1039	1065	1092	1119	1147	1175	1204	1234	1265	1296	1328	1361	1395	1430
Nathalia		712	716	721	726	730	734	737	741	745	748	752	755	758	761	764	767	770	773	776	779	782	786	789	792	795	798	801
Numurkah, Wunghnu	1	1973	1998	2023	2049	2072	2096	2119	2143	2166	2189	2212	2236	2258	2280	2303	2326	2349	2373	2396	2420	2444	2469	2493	2518	2543	2568	2594
Picola		58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
Pyalong		141	143	145	147	149	151	153	155	157	158	160	162	164	166	168	169	171	173	175	177	179	181	183	185	187	189	191
Rushworth		545	546	547	548	549	550	551	552	552	553	554	555	555	556	557	557	558	558	559	560	560	561	562	562	563	564	564
Seymour, Mangalore, Tallarook		3117	3133	3148	3163	3176	3189	3201	3214	3223	3233	3242	3252	3258	3265	3271	3278	3284	3291	3298	3304	3311	3317	3324	3331	3338	3344	3351
Shepparton, Congupna, Tallygaroo	ppna 15	5745	16065	16392	16725	17035	17352	17674	18002	18314	18631	18953	19281	19594	19912	20235	20563	20896	21235	21579	21929	22284	22646	23013	23386	23765	24150	24542
Stanhope		234	235	235	236	236	236	237	237	238	238	238	239	239	239	239	240	240	240	240	241	241	241	242	242	242	242	243
Strathbogie		24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
Strathmerton		216	217	218	219	220	220	221	222	222	223	224	224	225	225	226	226	226	227	227	228	228	229	229	230	230	230	
Tatura		1648	1666	1685	1704	1720	1736	1752	1769	1785	1800	1816	1832	1848	1864	1880	1897	1913	1930	1946	1963	1980	1997	2015	2032	2050	2068	2085
Thornton		99	99	100	100	100	101	101	102	103	104	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
Tongala		537	539	542	545	547	549	551	553	555	556	558	560	560	560	560	560	560	561	561	561	561	561	562	562	562	562	562
Upper Delatite		399	406	414	422	430	439	447	455	464	472	481	490	499	509	518	527	537	547	557	567	578	588	599	610	621	633	644
Violet Town		368	369	370	371	372	372	373	374	375	376	377	378	379	380	381	383	384	385	386	387	388	389	390	391	392	393	395
Wandong, Heathcote Junction		638	643	649	655	661	667	673	680	685	690	696	701	705	709	713	717	721	725	729	734	738	742	746	750	755	759	763
Woods Point		59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
Yea		619	627	635	642	651	660	670	679	689	700	710	721	733	744	756	768	781	793	806	819	832	845	859	873	887	901	916
	TOTAL 47	7792	48579	49384	50207	50989	51790	52607	53444	54215	55000	55801	56618	57396	58190	58998	59822	60661	61517	62389	63278	64184	65108	66050	67011	67991	68990	70009



# Non Residential Connections Forecast

Towns	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17 2	017-18 20	18-19 2	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25 2	025-26	2026-27   2	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34 2	034-35 2	035-36	2036-37
Alexandra	198	198	199	199	200	201	202	202	204	205	207	208	210	211	213	214	216	218	219	221	223	224	226	228	230	231	233
Avenel	27	27	28	28	28	28	29	29	29	29	30	30	30	30	31	31	31	31	32	32	32	33	33	33	33	34	34
Barmah	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Baxters Road (Goulburn Weir)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bonnie Doon	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	15	15	15	15	15	15	15	15	15
Broadford, Clonbinane	115	116	117	118	119	119	120	121	121	122	123	123	124	124	124	125	125	125	126	126	126	127	127	127	128	128	128
Cobram, Yarroweyah	402	405	408	412	415	417	420	423	426	429	432	435	438	441	444	447	449	452	455	458	461	464	467	470	473	476	479
Colbinabbin	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
Corop	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Dookie	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
Eildon	62	63	63	63	63	64	64	64	64	65	65	65	66	66	67	67	67	68	68	69	69	69	70	70	71	71	71
Euroa	202	203	204	204	205	206	207	208	209	210	211	212	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226
Girgarre	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
Katamatite	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
Katandra West	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
Katunga	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
Kilmore	218	221	224	228	230	233	236	239	242	244	247	250	252	254	256	258	261	263	265	267	270	272	274	277	279	282	284
Kirwans Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kyabram	378	380	381	383	385	386	388	390	391	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410
Longwood	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
Mansfield	305	308	311	315	318	321	324	327	331	334	337	340	344	347	350	354	357	361	364	368	371	375	378	382	386	390	393
Marysville, Buxton	47	55	64	75	81	87	93	100	101	101	102	103	104	104	105	106	107	108	108	109	110	111	112	113	113	114	115
Merrigum	31	31	31	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Molesworth	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Mooroopna, Toolamba	237	239	240	242	243	244	245	246	246	247	248	248	249	249	250	250	250	251	251	252	252	253	253	253	254	254	255
Murchison	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
Nagambie	115	115	116	116	117	117	118	118	119	119	120	120	121	122	122	123	123	124	124	125	126	126	127	127	128	129	129
Nathalia	114	115	115	116	116	116	116	117	117	117	118	118	118	118	119	119	119	119	119	120	120	120	120	121	121	121	121
Numurkah, Wunghnu	290	290	291	292	292	293	293	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294	294
Picola	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Pyalong	15	15	15	15	16	16	16	16	16	16	16		16	16	16	17	17	17	17	17	17	17	17	17	17	18	18
Rushworth	84	84	84	84	84	84	84	84	84	84	84		84	84	84	84	84	84	84	84	84	84	84	84	84	84	84
Seymour, Mangalore, Tallarook	459	460	461	463	463	464	465	466	467	468	468	469	469	470	470	471	471	472	472	473	473	474	474	475	475	476	476
Shepparton, Congupna, Tallygaroopna	2194	2221	2248	2276	2300	2324	2349	2374	2396	2418	2441	2463	2484	2504	2524	2545	2566	2587	2608	2630	2651	2673	2695	2717	2740	2762	2785
Stanhope	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
Strathbogie	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Strathmerton	32	32	32	32	32	32	32	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
Tatura	187	188	188	189	190	190	190	191	191	192	192	192	193	193	193	194	194	194	195	195	195	196	196	196	197	197	197
Thornton	15 78	15	15 78	15 78	15		15 78	15 78	15 78	15	15 78	15	15 78	15	15	15 78	15 78	15 78	15	15 78	15						
Tongala	14	. 0		78 15				78		78 15	78 16					78	16	78 17	17	18	78				78	18	78 18
Upper Delatite	45	14	14	45	15	15	15 45	15	15		16		16	16	16	16		46		17	17 46	17	17	18	18		47
Violet Town	27	45	45	45 27	45	45	28	45	46	46	46		46	46	46	46	46		46	46		46	46	46	47	47 30	
Wandong, Heathcote Junction Woods Point	21	27	27	21	28	28	28 7	28	28	28	28	∠8 7	29	29	29	29	29	29	29	29	29	29	29	29	30	30 7	30
	115	115	116	117	118	118	119	120	121	122	123	124	125	106	127	128	129	130	131	132	133	134	135	136	137	138	140
Yea TOTAL	6282	6337	6394	6453	6501	6550	6600	120 <b>6650</b>	121 <b>6691</b>	6732	6773	6814	6851	126 <b>6889</b>	6927	6965	7003	7042	7081	7120	7159	7199	7239	7280	7321	7362	7403
LIOIAL	0282	0337	0394	0493	6901	0000	6600	0690	ооэт	0132	6113	0014	9931	0009	0921	0900	1003	1042	1001	1120	1199	1 199	1239	1200	1321	1302	1403



# Appendix 2 - Average Water Demand

# **New Residential Connection Demand**

	2013/14 New Connections	Demand Per New Connection (KL)	liotal New Demand (KL)
Alexandra	17	159	2703
Avenel	7	186	1302
Barmah	1	217	217
Baxters Road (Goulburn Weir)	0	217	0
Bonnie Doon	1	86.7	87
Broadford, Clonbinane	35	159	5565
Cobram, Yarroweyah	38	318	12084
Colbinabbin	1	182.9	183
Corop	0	180.5	0
Dookie	1	217	217
Eildon	5	119	595
Euroa	13	186	2418
Girgarre	1	217	217
Katamatite	1	217	217
Katandra West	1	217	217
Katunga	1	217	217
Kilmore	110	159	17490
Kirwans Bridge	0	217	0
Kyabram	26	217	5642
Longwood	0	159	0
Mansfield	34	159	5406
Marysville, Buxton	29	139.9	4057
Merrigum	1	217	217
Molesworth	0	159	0
Mooroopna, Toolamba	52	217	11284
Murchison	2	217	434
Nagambie	19	217	4123
Nathalia	5	217	1085
Numurkah, Wunghnu	25	217	5425
Picola	0	217	0
Pyalong	2	159	318
Rushworth	1	217	217
Seymour, Mangalore, Tallarook	15	186	2790
Shepparton, Congupna, Tallygaroopna	333	217	72261
Stanhope	0	217	0
Strathbogie	0	117.3	0
Strathmerton	1	217	217
Tatura	19	217	4123
Thornton	0	159	0
Tongala	3	217	651
Upper Delatite	8	86	688
Violet Town	1	186	186
Wandong, Heathcote Junction	6	159	954
Woods Point	0	159	0
Yea	8	159	1272
Total	823	250	165079

Average Demand Per New	
Connection (KL)	201



# **New Non Residential Connection Demand**

Town	2013/14 New Connections	Demand Per New Connection (KL)	Total New Demand (KL)
Alexandra	0	389	0
Avenel	0	839	0
Barmah	0	255	0
Baxters Road (Goulburn Weir)	0	0	0
Bonnie Doon	0	763	0
Broadford, Clonbinane	1	275	275
Cobram, Yarroweyah	3	408	1224
Colbinabbin	0	326	0
Corop	0	119	0
Dookie	0	1042	0
Eildon	0	756	0
Euroa	1	587	587
Girgarre	0	353	0
Katamatite	0	154	0
Katandra West	0	449	0
Katunga	0	368	0
Kilmore	3	420	1260
Kirwans Bridge	0	0	0
Kyabram	2	681	1362
Longwood	0	715	0
Mansfield	3	360	1080
Marysville, Buxton	11	436	4796
Merrigum	0	495	0
Molesworth	0	1111	0
Mooroopna, Toolamba	1	1131	1131
Murchison	0	705	0
Nagambie	1	1080	1080
Nathalia	0	686	0
Numurkah, Wunghnu	1	270	270
Picola	0	135	0
Pyalong	0	154	0
Rushworth	0	632	0
Seymour, Mangalore, Tallarook	1	572	572
Shepparton, Congupna, Tallygaroopna	28	648	18144
Stanhope	0	166	0
Strathbogie	0	70	0
Strathmerton	0	492	0
Tatura	1	786	786
Thornton	0	1159	0
Tongala	0	818	0
Upper Delatite	0	732	0
Violet Town	0	427	0
Wandong, Heathcote Junction	0	469	0
Woods Point	0	165	0
Yea	1	386	386
Total	58		32953

Average Demand Per New	
Connection (KL)	568



# Appendix 3 – New Operating Costs - Water

	1	New Operating Costs WP3 (\$)							New Oner	ating Cost	s WP4 (\$)	New Operating Costs WP4 (\$)														
Project Description	Growth (%)	O&M (%)	13/14		15/16		17/18																			
820 - Landowner Reticulation Works - Water - GVW	100%	0.8%	14400	28000	41600	55200	68800	82400	96000	109600	123200	136800	150400	164000	177600	191200	204800	218400	232000	245600	259200	272800	286400	300000	313600	327200
823 - Shared Assets - Water - GVW	100%	0.9%	5623		16507	21949	27391		38275			54601	60043		70927	76369	81811	87253		98137		109021				
2009 - Alexandra - Water Network Augmentation - Stage 1	50%	0.070	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0.200	0	0	0	0	0	0	0	(
2343 - Alexandra - Clear Water Storage Augmentation	100%	1.9%	0	-	0	0	0	0	0	0	0	0	Ť				Ů		-		- C	8455	8455	8455	8455	8455
2348 - Alexandra - Water Network Augmentation - Stage 2	50%	2.070	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
1911 - Broadford - Broadford to Kilmore Pipeline	100%	0.8%	0	0	0	0	0	0	0	0	0	0				_					-	125440	125440	125440	125440	125440
2304 - Broadford - WTP Upgrade	100%	1.9%	0	-	0	0	0	0	0	145540	145540	145540	145540	145540	145540	145540	145540	145540	145540	145540	145540	145540	145540	145540		
1384 - Cobram - WTP Augmentation - Stage 2	100%	1.9%	0	-	0	0	0	0	0	0	0	0	0	0	108870	108870	108870	108870	108870	108870		108870	108870	108870		
2338 - Euroa - Clear Water Storage Augmentation	100%	1.9%	0	-	0	0	26980	26980	26980	26980	26980	26980	26980	26980	26980	26980	26980	26980	26980	26980	26980	26980	26980	26980	26980	26980
1817 - Kilmore - Green Street WPS Upgrade	100%	2.070	0		0	0	0	0	0	0	0	0	0		0	0	0	0		0	0	0	0	0		20000
1818 - Kilmore - Water Network Augmentation	100%	0.8%	0	-	0	0	0	0	5840	5840	5840	5840	5840		5840	5840	5840	5840	5840	5840	5840	5840	5840	5840		5840
2326 - Kilmore - North Tank Land Acquisition	100%	0.070	0	-	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	
1819 - Kyabram - High Lift Water Pump Station Upgrade	100%		0	-	2000	2000	0	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	0	0	2000	2000	0	0		2000
2124 - Kyabram - Albion Street Water Main Augmentation	100%	0.8%	0	-	0	1360	1360	1360	1360	1360	1360	1360	1360	1360	1360	1360	1360	1360	1360	1360	1360	1360	1360	1360	1360	1360
1821 - Mansfield - WTP Upgrade	100%	1.9%	0		0	1500	1000	1300	1300	1300	52060	52060	52060	52060	52060	52060	52060	52060	52060	52060	52060	52060	52060	52060	52060	52060
2003 - Mansfield - Water Network Augmentation - Stage 1	100%	0.8%	0	-	0	1840	1840	1840	1840	1840	1840	1840	1840	1840	1840	1840	1840	1840	1840	1840	1840	1840	1840	1840	1840	
2349 - Mansfield - Water Network Augmentation - Stage 2	100%	0.8%	0		0	1040	1040	1040	1040	1040	1040	1040	1040	1040	5760	5760	5760	5760	5760	5760	5760	5760	5760	5760	5760	5760
1823 - Marysville - Disinfection Upgrade	29%	0.070		U	28800	28800	28800	28800	28800	28800	28800	28800	28800	28800	28800	28800	28800	28800	28800	28800	28800	28800	28800	28800	28800	
2217 - Mooroopna - McLennan Street Pump Station Upgrade	100%		0	0	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
2218 - Mooroopna - DN300 Distribution Main to Mooroopna West Growth Corrid	100%	0.8%	0	Ŭ	0	0	0	6280	6280	6280	6280	6280	6280	6280	6280	6280	6280	6280	6280	6280	6280	6280	6280	6280	6280	6280
2220 - Mooroopna - Echuca Road Pump Station Upgrade	100%	4.3%	0		0	0	0	0280	0280	0280	0280	0280	0280	0280	0280	0280	0280	0280	0280	0280	0280	0280	0280	0280	0280	0280
2223 - Mooroopna - McLennan Street Water Main Augmentation	100%	0.8%	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	13080	13080	13080	13080	13080	13080	13080	13080
2126 - Nagambie - Clear Water Storage Upgrade	85%	1.9%	0		32783	32783	32783	32783	32783	32783	32783	32783	32783		32783	32783	32783	32783	32783	32783	32783	32783	32783	32783	32783	32783
2230 - Nagambie - WTP Capacity Upgrade	100%	8.4%	0		32163	115920	115920		115920	115920	415920	115920	115920	115920	115920	115920	415920	115920	115920	115920		115920	415920	115920		
1825 - Numurkah - WTP Upgrade	28%	0.4%	0		0	115920	113920	115920	115920	115920	413920	115920	113920	115920	115920	115920	413920	113920	115920	113920	115920	115920	413920	113920	113920	113920
2245 - Numurkan - Exhibition Street & Tunnock Road Water Main Augmentation	100%	0.8%	0		0	0	0	0	0	0	0	0	0	0	0	0	0	2040	2040	2040	2040	2040	2040	2040	2040	2040
	100%	1.9%	0	-	0	0	0	326610	326610	326610	326610	326610	226610	326610	326610	326610	326610	326610		326610	326610	326610	326610	326610		
1226 - Shepparton - WTP Capacity Upgrade 1403 - Shepparton - Old Dookie Road Water Main	100%	8.4%	0		0	0	0	320010	320010	320010	320010	320010	320010	320010	320010	320010	320010	320010	76020	76020	76020	76020	76020	76020		
	100%	0.8%	0		0	0	0	0	0	0	31200	31200	31200	31200	31200	31200	31200	31200		31200	31200	31200	31200	31200	31200	31200
1833 - Shepparton - DN375 Direct Feed Water Main to South Tank  1834 - Shepparton - DN450 Trunk Water Main South of Kialla Lakes Drive	100%	0.8%	0		0	0	0	0	0	0	9000	9000	9000	31200 9000	9000	9000	9000	9000	31200 9000	9000	9000	9000	9000	9000	9000	
**	100%		0	-	0	0	0	0	0	0	9000	9000	9000		9000	9000	9000	9000	12960	12960	12960	12960				12960
1835 - Shepparton - DN375 Water Main South of Raftery Road	100%	0.8%	0	-	0	0	0	Ŭ	0	0	0	0	0	Ů	0	0	0	0		12960	12960	12960	12960	12960	12960	12960
2216 - Shepparton - Shepparton South Tank Pump Station Upgrade		0.40/		-	0	0	0	0			Ů	70500	Ů	Ů	70500	70500	70500	,	-	705.00	70500	70500	70500	Ů	70500	70500
2219 - Shepparton - Shepparton South Dedicated Pump Station	100%	8.4%	0		0	0	0	0	0	70560	70560	70560	70560	70560	70560	70560	70560	70560		70560	70560	70560	70560	70560	70560	70560
2221 - Shepparton - Lemnos Pump Station Upgrade	100%	0.004	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	Ů	ŭ	5000	5000	5000	5000	0	5000	5000
2222 - Shepparton - Poplar Avenue Water Main Augmentation	100%	0.8%	0		0	0	0	Ŭ	0	0	0	470700	470700	470700	470700	470700	470700	0	Ů	5800	5800	5800	5800	5800		5800
2334 - Shepparton - Raw Water Pump Station Augmentation	100%	8.4%	0		0	0	0	0	0	0	0	473760	4/3/60	473760	473760	473760	473760		473760	473760		473760	473760	473760		
2344 - Shepparton - Clear Water Storage Augmentation	100%	1.9%	0		0	0	0	0	0	0	0	101000	0	0	0	0	60325	60325	60325	60325	60325	60325	60325	60325	60325	60325
1854 - Tatura - WTP Capacity Upgrade	100%	1.9%	0	-	0	0	0	ŭ	0	121600	121600	121600	121600	121600	121600	121600	121600	121600	121600	121600	121600	121600	121600	121600	121600	
2335 - Tatura - Additional Raw Water Storage	100%	1.9%	0	-	0	0	0	0	0	0	0	24510	24510	24510	24510	24510	24510	24510		24510	24510	24510	24510	24510		
2319 - Yea - East Street Water Main Augmentation	100%	0.8%	0	-	0	640	640	640	640	640	640	640	640	640	640	640	640	640	640	640	640	640	640	640	640	
Year 21 - 30+ New Capex Allowance	100%	1.7%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86939.3	173879	260818	347757	434696
					10107					404005																
Total			20023	71848	121690	260492	306514	658446	683328	1040070	1451372	1668684	1687726	1706768	1840440	1859482	2238849	1959931	2081033	2105875	2124917	2364794	2770775	2576756	2682737	2788719



# Appendix 4 – Wastewater Connections Forecast

# **Wastewater - Residential Connections Forecast**

Town	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 2	2021-22	2022-23	2023-24	2024-25	2025-26 2	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	2036-37
Alexandra	1,011	1,027	1,043	1,059	1,076	1,093	1,110	1,131	1,152	1,173	1195	1218	1241	1265	1289	1314	1339	1365	1391	1417	1444	1472	1500	1528	1557	1587
Avenel	291	297	303	310	316	323	329	336	343	350	357	365	372	380	387	395	403	412	420	428	437	446	455	464	473	482
Bonnie Doon	189	190	191	192	192	193	194	195	195	196	197	198	198	199	200	201	201	202	203	203	204	205	206	206	207	208
Broadford	1,185	1,218	1,251	1,282	1,313	1,345	1,377	1,407	1,438	1,469	1501	1529	1557	1587	1616	1646	1676	1707	1738	1770	1802	1834	1868	1901	1935	1970
Cobram	2,176	2,211	2,247	2,280	2,314	2,348	2,383	2,417	2,451	2,486	2521	2554	2589	2623	2658	2694	2730	2766	2803	2841	2879	2917	2956	2996	3035	3076
Eildon	503	508	512	517	522	526	531	537	543	550	556	563	570	577	584	592	599	606	614	621	629	637	645	653	661	669
Euroa	1,323	1,336	1,349	1,361	1,374	1,387	1,401	1,414	1,428	1,441	1455	1470	1484	1499	1513	1528	1543	1558	1573	1588	1604	1619	1635	1651	1667	1683
Girgarre	82	82	83	83	83	84	84	84	85	85	85	85	85	86	86	86	86	86	86	86	86	86	86	86	86	86
Kilmore	1,765	1,866	1,971	2,075	2,184	2,297	2,415	2,534	2,656	2,784	2917	3047	3183	3324	3470	3622	3779	3942	4112	4287	4470	4659	4855	5059	5271	5490
Kyabram & Merrigum	2,696	2,722	2,748	2,771	2,794	2,817	2,841	2,861	2,882	2,903	2924	2938	2952	2966	2981	2995	3010	3024	3039	3053	3068	3083	3098	3113	3128	3143
Mansfield	1,365	1,397	1,430	1,463	1,496	1,530	1,564	1,599	1,634	1,671	1707	1744	1782	1820	1859	1899	1940	1981	2023	2066	2110	2155	2201	2247	2294	2343
Marysville	112	137	164	197	231	268	308	312	316	320	324	328	333	337	342	347	351	356	361	366	370	375	380	385	390	395
Mooroopna	3,269	3,317	3,366	3,410	3,454	3,499	3,544	3,585	3,627	3,670	3712	3751	3791	3831	3871	3911	3952	3994	4036	4078	4121	4164	4208	4252	4296	4341
Murchison	294	296	299	300	302	303	305	306	308	309	311	312	314	315	316	318	319	321	322	323	325	326	328	329	330	332
Nagambie	685	703	721	740	759	779	800	821	842	864	887	910	934	959	984	1010	1036	1063	1091	1119	1148	1178	1209	1240	1272	1305
Nathalia	666	671	675	679	683	686	690	693	697	700	703	706	709	712	715	718	721	723	726	729	732	735	738	741	744	747
Numurkah	1,766	1,789	1,814	1,836	1,858	1,880	1,903	1,925	1,947	1,969	1991	2012	2034	2055	2077	2099	2121	2144	2166	2189	2212	2236	2259	2283	2307	2331
Rushworth & Stanhope	638	640	641	642	644	645	646	647	648	649	650	651	652	653	654	654	655	656	657	658	659	660	661	661	662	663
Seymour	2,700	2,714	2,729	2,741	2,753	2,765	2,777	2,786	2,795	2,804	2813	2819	2825	2831	2838	2844	2850	2856	2863	2869	2875	2882	2888	2894	2901	2907
Shepparton	14,497	14,807	15,124	15,419	15,720	16,026	16,337	16,633	16,935	17,241	17553	17850	18152	18458	18770	19087	19408	19736	20068	20406	20749	21098	21452	21812	22178	22550
Strathmerton	213	214	215	216	216	217	218	218	219	219	220	220	221	221	221	222	222	223	223	224	224	224	225	225	226	226
Tatura	1,422	1,440	1,458	1,473	1,489	1,504	1,520	1,535	1,550	1,565	1580	1595	1610	1626	1641	1657	1672	1688	1704	1721	1737	1753	1770	1787	1803	1820
Tongala	509	511	514	516	518	520	522	523	525	526	528	528	528	528	528	529	529	529	529	529	530	530	530	530	530	530
Upper Delatite	330	338	346	353	361	369	377	385	393	402	410	419	427	436	445	454	464	473	483	493	503	513	524	534	545	556
Violet Town	244	245	246	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268
Wandong & Heathcote Junction	478	484	489	495	501	507	513	518	523	528	533	537	541	545	549	552	556	560	564	568	572	576	580	584	588	592
Yea	561	568	576	584	593	602	611	620	630	640	650	661	673	684	696	707	719	731	744	756	769	782	795	808	822	835
Total	40,971	41,728	42,503	43,239	43,992	44,762	45,549	46,273	47,012	47,765	48,533	49,265	50,012	50,772	51,547	52,337	53,142	53,963	54,799	55,652	56,522	57,409	58,314	59,236	60,177	61,137



# Wastewater - Non Residential Connections Forecast

Town	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21 2	2021-22	2022-23	2023-24	2024-25	2025-26 2	026-27 2	027-28	2028-29	2029-30	2030-31	2031-32 2	032-33	2033-34	2034-35	2035-36	2036-37
Alexandra	173	173	174	175	175	176	177	178	180	181	182	184	185	187	188	190	191	193	195	196	198	199	201	203	204	206
Avenel	21	21	22	22	22	22	23	23	23	23	24	24	24	24	25	25	25	25	26	26	26	26	27	27	27	27
Bonnie Doon	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	11	11	11	11	11	11	11
Broadford	106	107	108	108	109	110	111	111	112	112	113	113	113	114	114	114	115	115	115	116	116	116	117	117	117	118
Cobram	330	333	336	339	342	344	347	350	353	356	358	361	364	366	369	372	375	377	380	383	386	389	392	395	397	400
Eildon	50	50	51	51	51	51	52	52	52	53	53	53	54	54	55	55	55	56	56	56	57	57	58	58	58	59
Euroa	161	162	162	163	164	165	166	167	167	168	169	170	171	172	173	174	175	175	176	177	178	179	180	181	182	183
Girgarre	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Kilmore	199	202	205	208	210	213	216	218	221	223	226	228	230	232	234	236	239	241	243	245	247	250	252	254	256	259
Kyabram & Merrigum	358	360	361	363	365	366	368	369	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388
Mansfield	256	259	262	265	268	271	274	277	280	283	287	290	293	296	299	302	306	309	312	316	319	323	326	330	333	337
Marysville	28	36	47	52	58	64	71	71	72	73	73	74	75	75	76	77	78	79	79	80	81	82	82	83	84	85
Mooroopna	188	190	191	192	193	194	195	195	196	197	197	198	198	199	199	199	200	200	201	201	201	202	202	203	203	203
Murchison	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
Nagambie	100	101	101	102	102	103	103	104	104	105	106	106	107	107	108	108	109	109	110	111	111	112	112	113	114	114
Nathalia	88	89	89	89	90	90	90	91	91	91	91	91	92	92	92	92	93	93	93	93	94	94	94	94	94	95
Numurkah	244	244	245	245	246	246	247	247	247	247	247	247	247	247	247	247	247	247	247	247	247	247	247	247	247	247
Rushworth & Stanhope	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87
Seymour	392	393	394	395	396	397	398	398	399	400	400	401	401	402	402	403	403	403	404	404	405	405	406	406	407	407
Shepparton	1,907	1,933	1,959	1,982	2,005	2,028	2,052	2,073	2,094	2,115	2137	2156	2176	2195	2215	2235	2255	2275	2295	2316	2337	2357	2378	2400	2421	2443
Strathmerton	21	21	21	21	21	21	21	21	21	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
Tatura	153	153	154	155	155	156	156	156	157	157	157	158	158	158	159	159	159	159	160	160	160	161	161	161	162	162
Tongala	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
Upper Delatite	11	11	11	12	12	12	12	12	12	12	12	13	13	13	13	13	13	13	14	14	14	14	14	14	15	15
Violet Town	30	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	32
Wandong & Heathcote Junction	20	20	20	20	21	21	21	21	21	21	21	21	21	21	22	22	22	22	22	22	22	22	22	22	22	22
Yea	101	101	102	103	104	104	105	106	107	108	109	110	111	111	112	113	114	115	116	117	118	119	120	122	123	124
Total	5,138	5,192	5,248	5,293	5,340	5,387	5,435	5,473	5,512	5,551	5,590	5,626	5,661	5,697	5,733	5,769	5,806	5,843	5,880	5,917	5,955	5,993	6,032	6,070	6,109	6,148



# Appendix 5 – Average Wastewater Discharge Volume

# **Non Residential Connections**

Town	2013/14 New	Demand Per New	Total New
Town	Connections	Connection (KL)	Demand (KL)
Alexandra	0	172	0
Avenel	0	377	0
Bonnie Doon	0	727	0
Broadford	1	164	164
Cobram	3	281	843
Eildon	0	529	0
Euroa	1	252	252
Girgarre	0	51	0
Kilmore	3	321	963
Kyabram & Merrigum	2	285	570
Mansfield	3	255	765
Marysville	10	311	3110
Mooroopna	1	642	642
Murchison	0	451	0
Nagambie	0	458	0
Nathalia	0	218	0
Numurkah	1	207	207
Rushworth & Stanhope	0	210	0
Seymour	1	265	265
Shepparton	26	382	9932
Strathmerton	0	341	0
Tatura	1	298	298
Tongala	0	357	0
Upper Delatite	0	1344	0
Violet Town	0	184	0
Wandong & Heathcote Junction	0	332	0
Yea	1	281	281
Total	54		18292

Average Demand Per New	
Connection (KL)	339

Note that the number of new connections shown above for 2013/14 varies from Appendix 4 due to rounding



# Appendix 6 - New Operating Costs - Wastewater

				New Opera	ting Costs	s WP3 (\$)	)		New Oper	ating Cost	s WP4 (\$)															
Project Description	Growth (%)	О&М (%)	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37
820 - Landowner Reticulation Works - Sewer - GVW	100%	0.8%	14400	37600	60800	84000	107200	130400	153600	176800	200000	223200	246400	269600	292800	316000	339200	362400	385600	408800	432000	455200	478400	501600	524800	54800
823 - Shared Assets - Sewer - GVW	100%	0.9%	5623	11065	16507	21949	27391	32833	38275	43717	49159	54601	60043	65485	70927	76369	81811	87253	92695	98137	103579	109021	114463	119905	125347	13078
1903 - Broadford - WMF Reuse Capacity Upgrade	100%	1.7%	0	0	0	0	0	0	0	0	26010	26010	26010	26010	26010	26010	26010	26010	26010	26010	26010	26010	26010	26010	26010	26010
1813 - Euroa - WMF Reuse Capacity Upgrade	100%	1.7%	0	0	0	0	0	0	0	0	0	0	0	0	7480	7480	7480	7480	7480	7480	7480	7480	7480	7480	7480	7480
1901 - Kilmore - WMF Additional Winter Storage	100%	1.7%	0	0	0	76160	76160	76160	76160	76160	76160	76160	76160	76160	76160	76160	76160	76160	76160	76160	76160	76160	76160	76160	76160	7616
2305 - Kilmore - Sewer Network Augmentation	50%	0.4%	0	0	0	0	3200	3200	3200	3200	3200	3200	3200	3200	3200	3200	3200	3200	3200	3200	3200	3200	3200	3200	3200	320
2321 - Kilmore - WMF Additional Reuse Area	100%	3.0%	0	0	0	0	0	0	0	31800	31800	31800	31800	31800	31800	31800	31800	31800	31800	31800	31800	31800	31800	31800	31800	3180
1902 - Mansfield - WMF Additional Winter Storage	100%	1.7%	0	0	0	102850	102850	102850	102850	102850	102850	102850	102850	102850	102850	102850	102850	102850	102850	102850	102850	102850	102850	102850	102850	10285
2312 - Mansfield - Sewage Pump Station No.2 Upgrade	100%	4.3%	5375	5375	5375	5375	5375	5375	5375	5375	5375	5375	5375	5375	5375	5375	5375	5375	5375	5375	5375	5375	5375	5375	5375	537
2322 - Mansfield - WMF Additional Reuse Area	100%	3.0%	0	0	0	0	0	0	0	0	0	0	0	0	21600	21600	21600	21600	21600	21600	21600	21600	21600	21600	21600	2160
2309 - Marysville - WMF Reuse Capacity Upgrade	100%	3.0%	0	0	0	0	0	7950	7950	7950	7950	7950	7950	7950	7950	7950	7950	7950	7950	7950	7950	7950	7950	7950	7950	795
1502 - Mooroopna - WMF HRAL Upgrade	100%	5.2%	0	0	0	0	0	0	0	0	47320	47320	47320	47320	47320	47320	47320	47320	47320	47320	47320	47320	47320	47320	47320	4732
2235 - Mooroopna - WMF Reuse Capacity Upgrade	100%	4.3%	0	0	29670	29670	29670	29670	29670	29670	29670	29670	29670	29670	29670	29670	29670	29670	29670	29670	29670	29670	29670	29670	29670	2967
1904 - Nagambie - WMF Reuse Capacity Upgrade	100%	3.0%	0	0	0	0	0	0	12450	12450	12450	12450	12450	12450	12450	12450	12450	12450	12450	12450	12450	12450	12450	12450	12450	1245
2206 - Nagambie - SPS02 Upgrade	100%	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2224 - Nagambie - SPS04 Upgrade	100%	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2225 - Nagambie - SPS09 Additional Storage	100%	1.7%	0	0	0	0	3315	3315	3315	3315	3315	3315	3315	3315	3315	3315	3315	3315	3315	3315	3315	3315	3315	3315	3315	331
2226 - Nagambie - SPS04 Rising Main Replacement	50%	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2123 - Sawmill Settlement - WMF Reuse Capacity Upgrade - Stage 2	100%	3.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3000	3000	3000	3000	3000	300
2211 - Seymour - SPS01 Rising Main Replacement	50%	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1609 - Shepparton - WMF HRAL Additional Aerators & Mixers	100%	5.2%	0	0	0	0	0	0	0	0	0	65520	65520	65520	65520	65520	65520	65520	65520	65520	65520	65520	65520	65520	65520	6552
1837 - Shepparton - Kialla Lakes South Sewer Pump Station	100%	4.3%	0	18920	18920	18920	18920	18920	18920	18920	18920	18920	18920	18920	18920	18920	18920	18920	18920	18920	18920	18920	18920	18920	18920	1892
1838 - Shepparton - Kialla Lakes South Sewer Pump Station Rising Main Stages 1 $\&2$	100%	0.4%	0	0	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	2700	270
1839 - Shepparton - SPS54 Pump Station & Rising Main Upgrades	100%	0.4%	0	0	0	0	0	0	0	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	378
2008 - Shepparton - WMF Reuse Capacity Upgrade	100%	3.0%	0	0	0	0	0	0	0	0	0	93000	93000	93000	93000	93000	93000	93000	93000	93000	93000	93000	93000	93000	93000	9300
2213 - Shepparton - SPS44 Upgrade	100%	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2324 - Shepparton - Kialla Lakes South SPS Rising Main Stage 3	100%	0.4%	0	0	0	0	0	0	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	130
2325 - Shepparton - Kialla Lakes South SPS Rising Main Stage 4	100%	0.4%	0	0	0	0	0	0	0	0	0	5540	5540	5540	5540	5540	5540	5540	5540	5540	5540	5540	5540	5540	5540	554
1389 - Tatura - WMF Augmentation	100%	1.7%	0	0	0	0	0	0	0	0	0	0	0	0	55896	55896	55896	55896	55896	55896	55896	55896	55896	55896	55896	5589
1606 - Tatura - Additional Offsite Reusers	100%	0.4%	0	0	0	0	0	0	0	0	4720	4720	4720	4720	4720	4720	4720	4720	4720		4720	4720	4720	4720	4720	472
1709 - Tatura - Additional WMF Winter Storage (Stage 2)	100%	1.7%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27200	27200	27200	27200	27200	27200	27200	2720
2306 - Wandong - Sewer Network Augmentation	50%	4.3%	0	0	17415	17415	17415	17415	17415	17415	17415	17415	17415	17415	17415	17415	17415	17415	17415	17415	17415	17415	17415	17415	17415	1741
Kilmore WMF Upgrade	100%	1.7%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	442000	442000	442000	442000	442000	442000	442000	442000	442000	44200
Year 21 - 30+ New Capex Allowance	100%	1.7%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53070	106140	15921
Total			25398	72960	151387	359039	394196	430788	473180	537402	644094	836796	865438	894080	1007698	1036340	1506982	1535624	1591466	1620108	1651750	1680392	1709034	1790747	1872459	195417



# Appendix 7 - Negotiating Framework

# New Customer Contributions Negotiating Framework

## 1. Application of Negotiating Framework

This negotiating framework forms part of Goulburn Valley Water's approved water plan for the period 2013/18.

## 1.1 Purpose

This negotiating framework sets out procedural and information requirements relevant to services to which developer charges apply, as defined in the WIRO. It requires Goulburn Valley Water and connection applicants to negotiate in good faith to agree the price, standards and conditions of services to be provided. It also provides for transparent information to enable the connection applicant to understand the reasons for decisions made by Goulburn Valley Water.

The requirements set out in this negotiating framework are in addition to any requirements or obligations contained in the *Water Act* 1989. In the case of inconsistency between the *Water Act* 1989 and this negotiating framework, the *Water Act* 1989 will prevail.

This negotiating framework does not alter the rights of a connection applicant to seek a review of Goulburn Valley Water's decision by the Victorian Civil and Administrative Tribunal.

## 1.2 Who this negotiating framework applies to

This Negotiating Framework applies to Goulburn Valley Water and to any property owner – generally a property developer – that is a connection applicant who requests connection to Goulburn Valley Water's works in accordance with section 145 of the *Water Act* 1989.

It also applies to Goulburn Valley Water in responding to such requests from a connection applicant.

#### 1.3 No obligation to provide service, good faith obligation

Nothing in the negotiating framework imposes an obligation on Goulburn Valley Water to allow the connection applicant to connect to Goulburn Valley Water's works or provide services to the connection applicant.

Goulburn Valley Water can refuse its consent, consent, or consent subject to any terms and conditions that Goulburn Valley Water thinks fit, as provided under section 145(3) of the *Water Act* 1989.

However, Goulburn Valley Water and the connection applicant must negotiate in good faith the price, terms and conditions for services sought by the connection applicant.



#### 2. Timeframes

Goulburn Valley Water and the connection applicant will use their reasonable endeavours to achieve the following timeframes:

- (a) Goulburn Valley Water provides initial commercial information relating to services and identifies any additional information required to be submitted by the connection applicant within 28 days of receipt of service advice request from the connection applicant
- (b) Agree the milestones, information requirements and any other relevant issues prior to the issue of an Offer of Conditions; and
- (c) Adhere to any timetable established for negotiations, and progress negotiations in an expeditious manner.

The Indicative timeframes are set out in the flowchart in Appendix 1.

#### 3. Provision of information by the connection applicant

The connection applicant is required to provide sufficient information to enable Goulburn Valley Water to assess servicing requirements. Additionally, the connection applicant is required to provide additional commercial information if requested by Goulburn Valley Water.

Goulburn Valley Water and the connection applicant are required to maintain confidentiality at all times.

#### 4. Provision of information by Goulburn Valley Water

Goulburn Valley Water is required to provide the following information to the connection applicant in accordance with section 268(4) of the *Water Act* 1989:

- (a) the amount of the payment required;
- (b) the reason why the payment is required;
- (c) any works or services that have been or will be provided;
- (d) the property in relation to which payment is required;
- (e) if payments are required in relation to a group of properties, the amounts required in relation to each property;
- (f) the right of the owner to object and apply for a review under section 271 of the *Water Act* 1989; and
- (g) that details of the proposed services and the costs are available for inspection, free of charge, at Goulburn Valley Water's office during normal business hours.



# 5. Pricing principles

Goulburn Valley Water's new customer contribution charges will:

- (a) have regard to the incremental infrastructure and associated costs in one or more of the statutory cost categories attributable to a given connection;
- (b) have regard to the incremental future revenues that will be earned from customers at that connection; and
- (c) be greater than the avoidable cost of that connection and less than the standalone cost of that connection.

In setting new customer contribution charges, Goulburn Valley Water will comply with:

- (a) the regulatory principles set out in clause 14 of the WIRO; and
- (b) any specific pricing principles approved by the Essential Services Commission as part of Goulburn Valley Water's water plan.

The pricing principles are based on the following:

When connecting to the Corporation's sewerage and water network, a developer is required to provide:

- All Reticulation Assets, and
- New Customer Contributions (NCC's) to each separate occupancy, calculated as a single charge that will apply across all towns and include brownfield development, and
- Bring forward charge (if development is not in-sequence with a logical and cost efficient network expansion as may be defined in an Infrastructure Master Plan or Capital Works Program)
- Where a reticulation asset is required to be upsized to service other developments, the developer will be required to fund the cost of a reticulation asset size, with the additional cost for upsizing beyond reticulation asset size to be funded by the water corporation.

A Reticulation Asset is defined as, a water main that is 150mm or less in diameter or a gravity sewerage main that is 225mm or less in diameter, and all associated assets. Larger sized assets and larger sized associated assets to predominately serve a single development or property (usually a non-residential, commercial or industrial property) are also reticulation assets.

A Reticulation Asset is to be fully funded by the developer and vested to the water corporation, regardless of whether it is required to be sized or positioned to service other developments.

Associated assets that are deemed to be reticulation assets include; but are not limited to:

• Sewer Pump Stations, emergency storages and rising mains (where the gravity sewer inlet to sewer pumping station is less than or equal to 225mm diameter)



- Water Pump Stations (where the pump discharges into water mains of 150mm diameter or less)
- Pressure Reducing Valves (where connected to water mains of 150mm diameter or less)
- Water Tanks (where outlet main is 150mm diameter or less)

Other growth related assets will be provided by the water corporation, the incremental cost of which is recovered through the New Customer Contributions and the Bring Forward Charge (if applicable).

The standard NCC for water is calculated based on water usage per standard connection. Where water usage for a new customer will vary significantly from the standard amount, a non-standard NCC charge will be negotiated with the customer. The non-standard charge will be based on the equivalent number of standard connections that the new customer represents on a water usage basis. The number of standard connections may be determined based on a yearly volume, peak day volume, winter volume or instantaneous flow rate depending on which is the most critical to servicing the customer

A non-standard NCC for sewer may be negotiated with non-residential, commercial or industrial properties with sewer discharge volumes or loadings that are above standard residential amounts. The non-standard charge will be based on the equivalent number of standard connections that the new customer represents on a discharge volume or loading basis. The number of standard connections may be determined based on a yearly volume, peak day volume, instantaneous flow rate or a range of loading parameters depending on which is the most critical to servicing the customer

## **Exceptional Circumstances**

Goulburn Valley Water reserves the right to apply a different charge should unforeseen exceptional circumstances arise requiring high growth capital expenditure to be incurred by Goulburn Valley Water for an unforeseen new development or event. The charge will be calculated in accordance with the new principles based methodology and could apply to water or sewer,

## **Benefiting Owners**

Where an owner is required by Goulburn Valley Water to provide additional works in servicing their land to achieve efficient servicing at least community cost, the Corporation may make a temporary contribution in respect of the additional works. Such contributions would be assessed on a case by case basis in accordance with the Corporation's guidelines and be subject to formal approval.

Where the additional works benefits land owned by other parties, the Corporation's contribution will be recovered as a "benefiting owner" contribution. The contribution would be raised as a contingent liability against the property in accordance with Section 268 of the Water Act 1989 including the right to object and apply for a review under Section 271. Contributions would be determined by the Corporation on a fair and reasonable basis taking into account the benefit to that property relative to the benefit to other properties.



Further to provide equity between owners a "benefiting owner" arrangement may also be applied where an owner provides works that directly benefits land owned by others. In this case the proponent will temporally bear the assessed contribution applicable to the other benefiting properties.

Contributions would remain a charge on the land until the benefit was realised by the owner wanting the subject land to become a serviced property (e.g. connected) or is developed in a manner requiring servicing. The contribution would be recovered at present day cost in accordance with the Corporation's guidelines.

Situations where "benefiting owner" arrangements may apply include:

- Reticulation sewage pumping stations and associated infrastructure;
- Upsizing of reticulation assets;
- Extension of reticulation assets though a development to facilitate servicing of another property or properties; and
- Reticulation works providing direct benefit to properties other than the subject land.

# 6. Consultation with affected parties

If Goulburn Valley Water considers that persons other than the connection applicant may be affected by proposed connection services, then:

- (a) subject to reasonable confidentiality requirements, Goulburn Valley Water will share any necessary information with others potentially affected to assess impacts; and
- (b) the connection applicant will allow sufficient time for reasonable consultation with affected parties to occur.

## 7. Payment of Water Business's Costs

The connection applicant will be requested to pay:

- Initial Fee (2% estimated cost at feasibility)
- Existing outstanding works charge (if applicable)
- Administration review fees at cost (less Initial Fee)
- Project oncost (if applicable)
- New Customer Contributions
- Pressure sewer contribution in lieu of sewer (if applicable subject to GVW approval)
- Maintenance Security Deposit (refundable)

# 8. Termination of negotiations



The connection applicant may elect not to continue with its application for a service to which a developer charge applies, and may terminate the negotiations by giving Goulburn Valley Water written notice of its decision to do so.

Goulburn Valley Water may terminate a negotiation under this negotiating framework by giving the connection applicant written notice of its decision to do so where Goulburn Valley Water believes on reasonable grounds that the connection applicant is not conducting the negotiation under this negotiating framework in good faith.

## 9. Dispute resolution

An owner who is required to make a payment under section 268, 269 or 270 may, within one month after receipt of the notice (or any longer time allowed by the Corporation and specified in the notice), object in writing to the Corporation on any of the following grounds:

- (a) in the case of a notice under section 268 (provision of new services), that the property of the owner will not benefit from the provision of the services;
- (b) if there are several properties that will benefit, that the basis of distribution of the cost between the owners of those properties is unreasonable;
- (c) that the amount is excessive;
- (d) if there are several properties that will benefit, that any owner who has been required to pay should not be required to do so, or that any owner who has not been required to pay should be required to do so;
- (e) in the case of a notice under section 269 (increased services), that the use of the services has not increased, or will not increase, as the case requires;
- (f) that the payment was not set in accordance with an Order under section 4D(1)(a) of the Water Industry Act 1994 or in accordance with the Essential Services Commission Act 2001;
- (g) in the case of a notice under section 268(1), any other grounds.

Goulburn Valley Water must, within 2 months after receipt of an objection, notify the connection applicant of its decision on the objection.

2. The connection applicant may apply to the Administrative Appeals Tribunal for review of the Corporation's decision on any of the grounds specified in sub-section (1) (a) to (e).



## **Appendix 1. Timeframes**

