Riverina Water County Council

Development Servicing Plan

March 2022

Riverina Water

Riverina Water County Council

Development Servicing Plan
For Water Supply
2022

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Prepared by

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Executive Summary

This Development Servicing Plan (DSP) covers water supply developer charges for the areas serviced by Riverina Water County Council (RWCC) as shown in Table 1.

Table 1: Water Supply Service Areas

Areas	Towns and Villages Included
Wagga Wagga	Wagga Wagga urban area, the villages of Brucedale, Currawarna and Ladysmith and the rural areas South of Wagga Wagga including Uranquinty, The Rock, French Park, Milbrulong, Mangoplah, Yerong Creek, Pleasant Hills, Henty, Walla Walla, Morven and all the rural customers between these towns and villages (i.e. Southern Trunk Main).
Western Trunk Main	Lockhart, Boree Creek, Urana and Oaklands as well as rural customers between these towns and villages
Collingullie	Collingullie
Holbrook	Holbrook
Humula	Humula
Morundah	Morundah
Oura	Oura
Tarcutta	Tarcutta
Walbundrie/Rand	Walbundrie and Rand
Woomargama	Woomargama
And all other areas (e.g. rural areas along the Western and Southern trunk mains) within the proclamation covered by Riverina Water	

This DSP has been prepared in accordance with the Developer Charges Guidelines for Water Supply, Sewerage and Stormwater (2016) issued by the Minister for Lands and Water pursuant to section 306 (3) of the Water Management Act 2000. This document is to be registered with the NSW Office of Water.

The existing assets serving the DSP areas and the timing and expenditures for new water supply works that will serve the areas covered by this DSP are shown in section 5.

Water supply levels of service to be provided by Council are provided in section 6.

The developer charges methodology including capital charges, reduction amount and developer charges calculations results are described in section 8.

The developer shall be responsible for the full cost of the design and construction of water supply reticulation works equivalent to 100 mm in residential areas and 150 mm in commercial/industrial areas (see section 8.6).

The determination of developer charges to be paid and the definition of the Equivalent Tenement (ET) of developments which vary from a detached house (i.e. 1 ET) are described in section 8.8.

The previous DSP (2013) was separated into 5 separate DSP's for different areas, to identify any differences in development growth, and the corresponding cost of water supply headworks. The weighted average of the developer charge found that by far the greatest factor, and therefore the most influence on the rate, was growth within the Wagga Wagga area.

New Connections Growth

Year	15/16	16/17	17/18	18/19	19/20	20/21
All Rural	11	14	11	9	13	17
Wagga city	296	197	338	410	328	442
Total	307	211	349	419	341	459
Wagga %	96.4%	93.4%	96.8%	97.9%	96.2%	96.3%

In addition, applying commercial ET growth to the above graph, would simply emphasise an even greater weighting toward Wagga Wagga area growth.
Due to the vast majority of recent and projected growth being within the Wagga Wagga area, and the majority of projected capital works to service growth being within the Wagga Wagga area, all calculations included in the proposed developer charge have been based on the entire Riverina Water supply system as a whole. A single developer charge will be applied across the Riverina Water service area. The council's proposed developer charge for 22/23 is $4,348.00.

The charges will be indexed on 1 July each year on the basis of movements in the CPI for Sydney. The developer charges calculated in this DSP shall be reviewed every five years.

Contents

1 Introduction

Developer Charges have two related functions:

They provide a source of funding for infrastructure required for new urban development

They provide signals regarding the cost of urban development thus encouraging less costly forms and areas of development

Section 64 of the *Local Government Act 1993* enables a local government council to levy developer charges for water supply, sewerage and stormwater. This derives from a cross-reference in that Act to section 306 of the *Water Management Act 2000* (an outline of the relevant legislation is provided in Appendix C).

A Development Servicing Plan (DSP) is a document which details the water supply developer charges to be levied on development areas utilising a water utility's water supply infrastructure.

This DSP covers water supply developer charges for all the areas served by Riverina Water County Council (RWCC), as the local water utility. See Figure 1 in section 5.1.

This DSP enables Riverina Water County Council to levy contributions where the anticipated development will, or is likely to, increase the demand for water supply services.

This DSP has been prepared in accordance with the Developer Charges Guidelines for Water Supply, Sewerage and Stormwater (2016) issued by the Minister for Lands and Water pursuant to section 306 (3) of the *Water Management Act 2000*. This document is to be registered with the NSW Office of Water.

This DSP supersedes any other requirements related to water supply developer charges for the area covered by the DSPs areas. This DSP take precedence over any of Council's codes or policies where there are any inconsistencies relating to water supply developer charges.

Developer charges calculated in this DSP will be reviewed after a period of five years.

2 Glossary

Below is a list of some terms used in Development Servicing Plans.

Capital Charge	Capital cost of assets per ET x Return on Investment (ROI) factor
Capital Cost	The present Value (MEERA basis) of assets used to service the development
CPI	Consumer Price Index
Developer Charge	A charge levied on developers to recover part of the capital cost incurred in providing infrastructure to new development
DSP	Development Servicing Plan
EP	Equivalent Person
ET	Equivalent Tenement
LEP	Local Environment Plan
MEERA	Modern Equivalent Engineering Replacement Asset
NPV	Net Present Value
OMA	Operation, maintenance and administration (costs)
Post 1996 Asset	An Asset that was commissioned by a water utility on or after 1st January 1996 or that is yet to be commissioned
PV	Present Value
Pre-1996 Asset	An Asset that was commissioned by a water utility before 1st January 1996
PS	Pumping Stations
Reduction Amount	The amount by which the capital charge is reduced to arrive at the developer charge. This amount reflects the present value of the capital contribution that will be paid by the occupier of a development as part of future annual charges
ROI	Return on investment. Represents the income that is, or could be, generated by investing money
RWCC	Riverina Water County Council. Also referred to as Council or Riverina Water.
Service Area	An area serviced by a separate water supply system, a separate small town or village, or a new development of over 500 lots (Note: this is standard terminology from the Developer Charges for Water Supply Guidelines, 2016).

3 Administration

Riverina Water County Council Development Servicing Plan Areas	
DSP Areas	The areas covered by this DSP are shown in Figure 1 in section 5.1.
DSP Boundaries	The basis for defining the DSP areas boundaries is the existing and future development serviced by Riverina Water County Council water supply schemes. Council may supply water to any development within the proclaimed district of the county council and any development that is connected to one of the systems of the service areas described in this plan. All developments need to be analysed based on their engineering requirements and may require a special agreement with Riverina Water County Council.
Application of Developer Charges	Developer charges will be levied to all land within the DSP areas which is serviced by water supply infrastructure. RWCC will assess the demand for service in terms of equivalent tenements (ET) and will levy developer charges proportional to the number of ETs. The developer charges will apply to new development and re-development (i.e. change of use).
Time & Payment of Developer Charges	Council will issue a Statement of Fees of Developer Charges at the time of assessing development application or other type of application or when RWCC become aware of a proposed change of use. If payment is made within the financial year, no further charges will apply for the development. If payment is not received within the financial year, a payment will be required prior to issue of Compliance Certificate and the charge will be recalculated in accordance with the DSP valid at that time. Payment of a developer charge is a precondition to the granting of a Compliance Certificate, which must be obtained in order to complete a development. A Compliance Certificate will not be issued until the developer charge payment has been received.
Review	Developer Charges relating to this DSP shall be reviewed every 5 years. A shorter review period is permitted if a major change in circumstances occurs.
Indexation	The developer charges will be adjusted on 1 July each year on the basis of movements in the CPI for Sydney.

4 Demographic and Land Use Planning Information

4.1 Population and Equivalent Tenements Projections

Riverina Water County Council's existing and forecast (in 30 years) population are shown in Table 3 and the estimated numbers of current and forecast (in 30 years) Equivalent Tenement (ET) are provided in Table 4.

Table 3: Population Growth

Service Area	2021 Population[1]	2050 Estimated Population	Forecast Growth rate[2]
Wagga Wagga	73,725	98,386	1%
Western Trunk	3,965	5,291	1%
Collingullie	221	295	1%
Holbrook	1,877	2.155	0.5%
Humula	124	124	0%
Morundah	69	69	0%
Oura	219	292	1%
Tarcutta	446	595	1%
Walbundrie/Rand	204	204	0%
Woomargama	159	159	0%

Source: [1] ABS Census data
[2] RWCC IWCM Strategy, 2021

Table 4: Estimated Number of ETs Growth

Service Areas	Equivalent Tenements (ETs) 2021	Equivalent Tenements (ETs) 2050	Total New ETs	Proportion of Growth
Wagga Wagga	30,718	40,994	10,276	92.9%
Western Trunk	1,652	2,204	552	4.9%
Collingullie	92	122	30	0.3%
Holbrook	782	897	115	1.0%
Humula	51	51	0	0%
Morundah	28	28	0	0%
Oura	91	121	30	0.3%
Tarcutta	185	247	62	0.6%
Walbundrie/Rand	85	85	0	0%
Woomargama	66	66	0	0%
Total			11,065	100%

Note: The number of ETs was estimated using the occupancy ratio of 2.4 EP/ET (Source: Council staff email 26 March 2013) and the population projections.

4.2 Land Use Information

This DSP should be read in conjunction with the relevant local Council planning instrument.

5 Water Supply Infrastructure

5.1 RWCC Serviced Areas Overview

Riverina Water County Council (RWCC) is responsible for the water supply functions within Wagga Wagga City Council, Lockhart Shire Council, and parts of Federation Council and Greater Hume Council areas. RWCC provides reticulated water to all urban and village areas within the county district.

The RWCC water supply system consists of the following components:

- Principle headworks at Wagga Wagga – consisting of raw water pumping stations, treatment plant on the banks of the Murrumbidgee River and several underground bores situated at East, North and West Wagga Wagga
- Wagga Wagga high lift pumps, reservoirs, trunk mains and reticulation mains
- Pumps, mains (pipes), reservoirs and reticulation which serve the townships and rural areas which receive supply from Wagga Wagga headwork's as well as the Holbrook, Walla Walla, Urana and Bulgary sources
- Bores, pumps, treatment plants, reservoirs and reticulation of the independent systems

The RWCC water supply serviced areas are shown in Figure1.

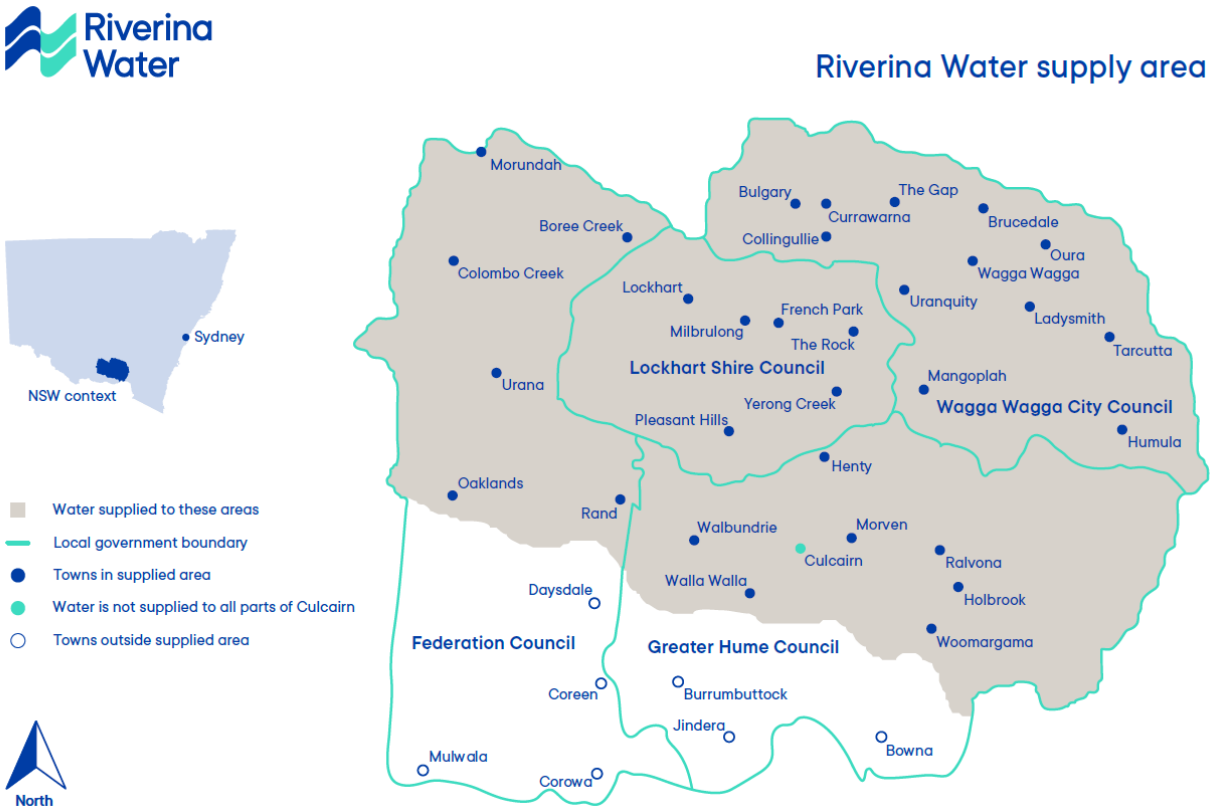

Figure 1: RWCC Serviced Areas

5.2 Existing Assets

The existing assets servicing the area covered by this DSP where costs have been included in the developer charges calculation are provided in Appendix A. A summary of the existing assets' remaining values is provided in Table 5.

Table 5: Summary of Existing Assets

Asset/Project	Year of Construction	Value	Growth Component	Remaining Value
Wagga WTP	2018	$35,456,653	52%	$17,383,890.44
WTP design & PM	2018	$3,561,441	52%	$1,746,123.64
Lamellar clarifiers & variations	2018	$2,542,137	52%	$1,246,373.45
Glenoak Reservoir	2019	$2,031,000	100%	$1,970,070.00
Low Level Reservoirs	2019	$6,072,000	0%	$0.00
Mangoplah Reservoir	2013	$528,000	67%	$321,921.60
Rural Reservoir (Dunns Rd)	2018	$2,159,000	10%	$207,264.00
Red Hill Reservoir # 3	2011	$1,650,000	100%	$1,468,500.00
Collingullie Reservoir	2016	$528,000	74%	$367,276.80
Woomargama Reservoir	2016	$115,000	0%	$0.00
Morundah Reservoir	2015	$415,000	42%	$162,099.00
Southern Trunk (WW to Res)	2015	$5,242,000	31%	$1,473,351.47
West Wagga Shires Pump upgrade	2015	$829,000	44%	$313,693.60
The Rock to Milbrulong BT	2018	$1,295,000	44%	$521,237.50
Milbrulong BT to Lockhart	2020	$1,046,000	55%	$552,288.00
Estella PH to Estella Res	2020	$2,661,000	100%	$2,590,040.00
Glenoak Reservoir (original)	2001	$252,000	100%	$199,080.00
Glenoak Pumphouse	2001	$35,000	100%	$20,300.00
Urana raw water pipeline	2010	$2,000,000	10%	$152,000.00
Urana raw water pump station	2010	$400,000	10%	$30,400.00
Boorooma 2 & 3	2014	$152,706	$20,676	$20,676
Boorooma 3 & 4A	2015	$77,748	$8,589	$8,589
Boorooma 5	2017	$96,008	$13,593	$13,593
Boorooma 7	2019	$107,960	$47,106	$47,106
Cooramin St 1	2017	$8,951	$1,669	$1,669
Farrer Rd 4	2016	$34,567	$10,463	$10,463
Bourkelands 20C	2014	$29,500	$6,601	$6,601
Bourkelands 20D	2014	$32,230	$7,091	$7,091
Bourkelands 24A	2015	$55,263	$9,947	$9,947
Staunton Estate 1	2015	$78,750	$25,387	$25,387
Brunslea Park 12	2015	$44,555	$731	$731
Brunslea Park 13	2015	$40,820	$4,278	$4,278
Brunslea Park 14A	2018	$67,699	$1,029	$1,029
58 Harris Rd 1	2020	$108,847	$19,368	$19,368
58 Harris Rd 2	2021	$71,404	$7,752	$7,752
86 Harris Rd 1	2021	$128,387	$33,786	$33,786
Estella Heights 1	2017	$76,060	$3,803	$3,803
Estella Heights 2	2018	$48,245	$1,447	$1,447
Estella Heights 4	2019	$106,689	$32,007	$32,007
Estella Rise 1B	2014	$92,088	$17,497	$17,497

Estella Rise 3A	2015	$140,995	$32,429	$32,429
Estella Rise 3B	2016	$59,802	$11,363	$11,363
Estella Rise 4 & 6	2018	$155,054	$34,112	$34,112
Estella Rise 2	2015	$106,345	$3,190	$3,190
Estella Rise 5	2016	$60,624	$7,882	$7,882
Crooked Creek 1	2017	$127,234	$41,655	$41,655
Governors Hill 2	2015	$43,422	$6,278	$6,278
Governors Hill 3	2017	$157,796	$45,322	$45,322
Governors Hill 5	2020	$103,855	$32,619	$32,619
Lloyd 2	2015	$35,549	$4,266	$4,266
Lloyd 3	2018	$34,482	$8,965	$8,965
Lloyd 7	2018	$140,556	$21,024	$21,024
Lloyd 8 & 9	2019	$283,539	$101,844	$101,844
Lloyd Wets 4A	2017	$78,749	$4,725	$4,725
Springvale Heights	2021	$97,097	$43,374	$43,374
Urana St 1	2016	$81,560	$22,181	$22,181
Urana St 2	2018	$49,098	$8,561	$8,561
Tatton 10	2008	$42,949	$34,359	$34,359
Tatton 11	2009	$106,848	$89,040	$89,040
Tatton 12A	2011	$144,474	$131,340	$131,340
Jacob Wenke 1	2019	$23,773	$11,672	$11,672
Bourkelands 1	2011	$16,905	$14,700	$14,700
Bourkelands 18a	2006	$24,138	$20,115	$20,115
Bourkelands 19	2007	$24,717	$22,470	$22,470
Bourkelands 21a	2010	$16,170	$15,400	$15,400
Bourkelands 22	2008	27951	$25,410	$25,410
Bourkelands 23	2008	26040	$21,700	$21,700
Hilltop 7	2008	$18,480	$16,800	$16,800
Hilltop 8	2010	$57,288	$47,740	$47,740
Lloyd 4	2007	$58,464	$48,720	$48,720
Glenoak 4	2004	$62,388	$54,250	$54,250
Glenoak 3	2003	$30,564	$27,785	$27,785
Glenoak 1	2008	$51,660	$43,050	$43,050
Tatton 8 & 9	2008	$71,555	$59,629	$59,629

Source: Asset Registers provided by RWCC staff

5.3 Future Assets

Total capital works program comprising works for growth, improved standards and renewals is estimated at $554 M (see Table 6). These works will be required over the next 30 years to provide water supply services to the Riverina Water service area and new development areas. A summary of the 30 years water supply capital works program is provided in Table 6.

The Developer Charges Guidelines for Water Supply, Sewerage and Stormwater (2016) recommend excluding the cost of capital works that are renewals or are to improve standards of service from the capital charges calculation.

Table 6: Summary of 30 years Water Supply Capital Works Program

	Total 30 years (2021 $)
Improve Standards of Service	$137 M
Growth	$79 M
Renewals	$330 M
Legislative/Governance	$8 M
Total	$554 M

The calculation of capital charges includes capital works for growth only, excluding reticulation, with an estimated value of $79 M. A detailed 30 year capital works program is provided in Table 2 of the RWCC DSP Background Document for Water Supply (see Appendix A).

The 30 years capital works expenditure for water supply is graphically shown in Figure 2. Timing of works and expenditure are to be reviewed and updated when required.

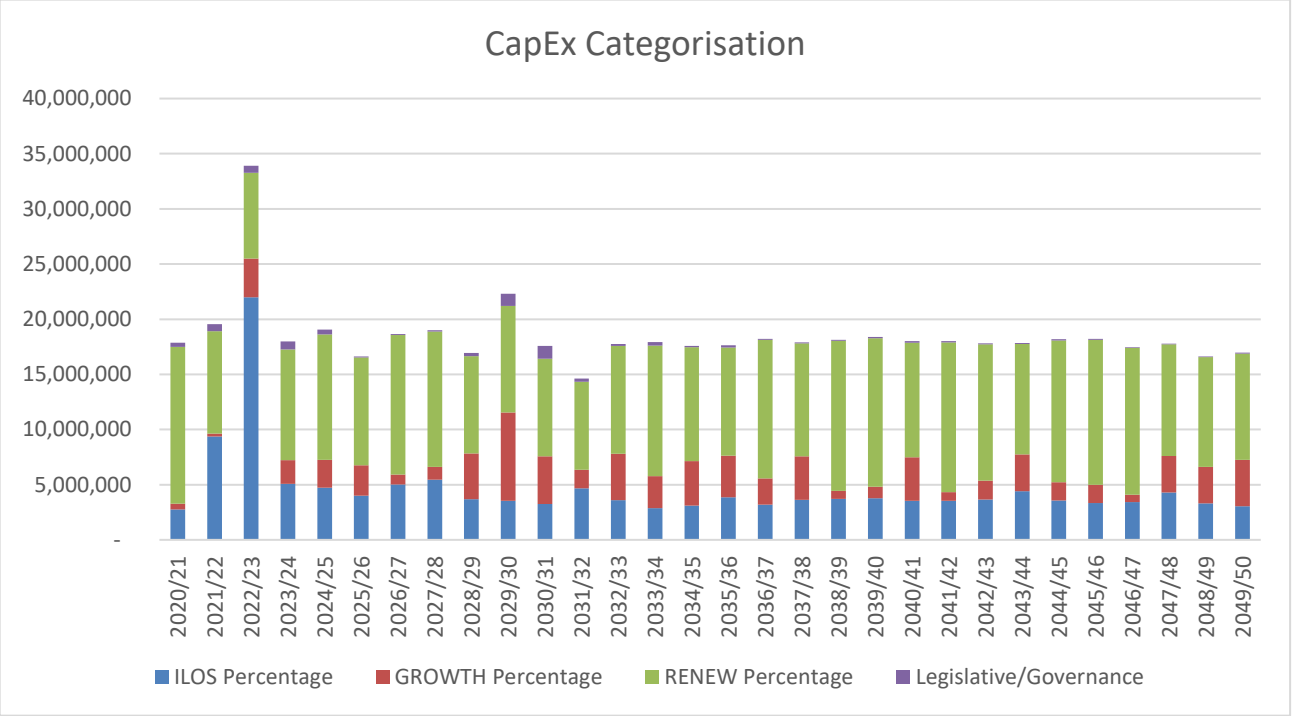

Figure 2: RWCC 30 Years Capital Works Program

6 Levels of Service

The levels of service applied to RWCC's water supply schemes are the standard targets that RWCC aims to achieve. They are not intended as a formal customer contract.

RWCC's system design and operations are based on providing the following levels of service.

Table 7: Water Supply Levels of Service

RWCC Levels of Service and Targets					
Pressure					
Provide pressures between 12 and 120 metres head at the water meter when service has no flow.					
Flow Rate					
Provide water to each connection at an available flow rate not less than:					
Diameter of service pipe (mm)	20	25	32	40	50
Minimum flow rate (litres/min)	20	35	60	90	160
Trickle feed option is on an economic basis case by case. The minimum flow rate available for rural properties may be less where elevations or operational Factors limit the supply. In some situation, the flow may be restricted to 11 kL/day. In such situations or where part of the land being serviced has elevation higher than the head available, connection approval may be granted provided a private balance tank and pressure system are installed within the property at the owner's cost.					
Consumption Restrictions in Droughts					
Water restrictions may be applied to encourage wise water use, to reduce excessive demand, or to conserve limited resource in time of drought.					
Restrictions may also be applied at the request of NSW Office of Water or to comply with an adopted Water Sharing Plan.					
To reduce evaporation losses, the use of fixed sprinklers for irrigation by residential, commercial and public customers is prohibited between 10 am - 5 pm during daylight savings.					

RWCC Levels of Service and Targets
Interruptions to Supply
Planned: Residential and commercial customers will receive 24 hours written notice and industrial customers will receive 7 days written notice. Unplanned: Not to occur more than 2 times per year if lasting up to 12 hours. Not to occur more than 5 times per year if lasting up to 5 hours.
Water for Fire Fighting
Provide fire flows in reticulation systems in accordance with NSW Water Directorate Fire Flow guidelines. A positive residual head should be maintained while supplying fire flow plus 75% of the design peak instantaneous demand.
Water Quality
Potable Water Supply: Where it can be achieved, water quality should meet the 2011 Australian Drinking Water Guidelines, published jointly be the National Health and Medical Research Council (NHMRC) and the natural Resource Management Ministerial Council. Some aesthetic or taste parameters may not be achieved at times in some village and rural areas.
Response Time Response time is defined as time to have staff on site to commence rectification of problem after notification by the public or RWCC staff. Council aims to meet the following response times depending on priority.
Priority 1: Defined as failure to maintain continuity or quality of supply to a large number of customers or to a critical use at a critical time. 1 hour (during working hours) 2 hours (after working hours)
Priority 2: Defined as failure to maintain continuity or quality of supply to a large number of customers or to a critical use at a non-critical time. 3 hours (during working hours) 4 hours (after working hours)
Priority 3: Defined as failure to maintain continuity or quality of supply to a single customer. One working day
Priority 4: Defined as a minor problem or complaint which can be dealt with at a time convenient to the customer and the water authority. Within 2 weeks
Catastrophe: Any situation of this nature would prompt immediate action involving senior personnel and emergency services with the aim of containing and resolving the situation as quickly as possible.

RWCC Levels of Service and Targets
CUSTOMER COMPLAINTS AND ENQUIRIES OF GENERAL NATURE
Respond to 95% of written complaints or inquiries within 10 working days. Respond to 95% of personal complaints or inquiries within 1 working day. (Source: Riverina Water Strategic Business Plan, revised March 2003)
SPECIAL CUSTOMERS
Certain customers may have special needs by virtue of specific health, commercial or industrial circumstances. Specific levels of service and associated charges should be negotiated with these customers.

Source: RWCC IWCM Strategy, 2021.

7 Design Parameters

Investigation, design and construction of water supply components are based as appropriate on:

Water Supply Investigation Manual (1986)

Council's Levels of Service (Refer to section 6 above)

WSAA Water Supply Code of Australia – Regional NSW Edition – WSA 03-2011-3.1

AUSPEC design specifications for water supply

RWCC's Operational Plan

NSW Water Directorate Guidelines

8 Developer Charges Methodology

8.1 Capital Charge

The capital charges were calculated for RWCC's water supply service area, based on the existing and future assets providing the services in Councils supply area. The capital charge calculations are summarized in Table 8 (also see Table 4 of Appendix A).

Table 8: Capital Charge Calculation

Year	Estimated expenditure (total) (2021/22$)	PV factor	PV of expenditure (@ 5%)	Number of new ETs (ET)	PV new ETs (ET)
21/22	$754,391	1.00	754,391	404	404
22/23	$4,013,641	0.95	3,822,516	410	390
23/24	$2,624,391	0.91	2,380,400	416	377
24/25	$3,006,491	0.86	2,597,120	422	365
25/26	$3,223,391	0.82	2,651,892	428	352
26/27	$1,403,641	0.78	1,099,790	435	341
27/28	$1,657,411	0.75	1,236,786	441	329
28/29	$4,634,891	0.71	3,293,931	448	318
29/30	$8,508,991	0.68	5,759,220	455	308
30/31	$4,801,991	0.64	3,095,406	462	298
31/32	$2,177,011	0.61	1,336,496	469	288
32/33	$4,699,151	0.58	2,747,497	476	278
33/34	$3,412,741	0.56	1,900,342	484	269
34/35	$4,517,041	0.53	2,395,484	491	260
35/36	$4,272,142	0.51	2,157,722	499	252
36/37	$2,877,293	0.48	1,384,027	507	244
37/38	$4,424,996	0.46	2,027,142	515	236
38/39	$1,218,501	0.44	531,628	523	228
39/40	$1,538,059	0.42	639,095	531	221
40/41	$4,428,419	0.40	1,752,476	540	214
41/42	$1,270,334	0.38	478,776	548	207
42/43	$2,181,802	0.36	783,141	557	200
43/44	$3,815,575	0.34	1,304,354	566	194
44/45	$2,157,904	0.33	702,552	576	187
45/46	$2,156,738	0.31	668,735	585	181
46/47	$1,166,728	0.30	344,538	595	176
47/48	$3,781,975	0.28	1,063,646	605	170
48/49	$3,799,530	0.27	1,017,698	615	165
49/50	$4,697,393	0.26	1,198,275	625	160
	93,222,575		51,125,077	14629	7,612
	Capital Charge per ET	**$6,717**			

Note: Figures in this table are rounded.

8.2 Reduction Amount

The Department of Primary Industries – Water guidelines require reduction amount to be calculated based on the proportion of income from future water sales that cover capital works.

Council has adopted the NPV of Annual Charges method to calculate the Reduction Amount. This method calculates the reduction amount as the NPV of the future (i.e. 30 years) net income from annual charges (i.e. income less OMA).

The reduction amount for RWCC was calculated as $2,500 per ET. Details of the reduction amount calculations are provided in Appendix B.

8.3 Calculated and Proposed Developer Charge

The calculated developer charges for this DSP are shown in Table 9. These developer charges reflect the cost of assets for servicing new development and are the maximum amounts which may be charged by Council.

Council has decided to levy a flat charge across the entire Riverina Serviced Area, as shown in Table 9.

When a lower developer charge is adopted, the cross-subsidy by existing customers' needs to be disclosed according to the requirements of the DSP guidelines. See section 8.4 for cross-subsidy calculation.

Table 9: Water Supply Developer Charges

DSP Area	Capital Charge (21/22$)	Reduction Amount	Calculated Developer Charge ($/ET) 22/23$[1]	Developer Charge Proposed by RWCC ($/ET) 22/23$
RWCC Supply Area	$6,717	$2,500	$4,348	$4,348

Note: [1] 2022/23 Developer Charge is calculated using Sydney CPI for December 2020 to December 2021 of 3.1% per year

8.4 Cross-Subsidy

As the full cost of headworks constructed to service new development is proposed to be recovered from the developer charge, there is no cross-subsidy from RWCC customers to headworks required for new development.

The RWCC calculated weighted average developer charge is $4,348.00 (22/23) (see Table 9).
RWCC proposes to charge the same amount across all DSP areas, which entails a cross-subsidy of between 3-4% from the Wagga Wagga city development charge revenue to DSP areas 1 to 4.

8.5 Reviewing/ Updating of Calculated Developer Charges

Developer charges relating to this DSP shall be reviewed every 5 years. In the period between any reviews, developer charges will be adjusted on 1 July each year based on movements in the CPI for Sydney at the end of the December quarter for the calendar year, as required by the Developer Charges Guidelines (excluding the impact of GST). Developer charges will be those charges determined by Council from time to time and will be published in Council's Annual Fees and Charges.

If a major change occurs in RWCC's circumstances such as the need for a significant capital works that had not been included in this DSP, Council may carry out a review in less than 5 years, subject to approval by NSW Office of Water. If the review results in a new DSP, the new DSP will be exhibited and registered in accordance with the requirements of the guidelines.

8.6 Exclusions

The developer charges do not cover the costs of reticulation works and assets commissioned pre -1970.

The developer shall be responsible for the cost of reticulation works within the new development. Where reticulation mains required within a development are larger than 100mm in residential areas or larger than 150mm in commercial/industrial areas, RWCC will cover the additional costs. These additional costs are for the "trunk" component of the mains and form part of the developer charge calculations.

The design and construction of the reticulation works will be undertaken by RWCC and shall be in accordance with development specifications for water supply as stated in Council's Operational Plan.

8.7 Time and Payment of Developer Charges

All developer charges will be paid at the rate applicable as at the day of payment.

Payment of developer charges must be finalised at the following stages:

- Prior to the installation of new reticulation to serve the proposed development
- Prior to the issue of a subdivision certificate by the constituent council - for development consents for subdivisions
- Prior to the issue of the construction certificate by the constituent council – for development consents involving building work
- Prior to issue of a RWCC Compliance Certificate

- Prior to water being used on the new development commensurate with any change of use

8.8 Determining Developer Charges to be paid

All new properties and those with change of use which are subject to payment of water supply charges are liable for paying developer charges. In order to assess the developer contribution applicable to a specific development, it is necessary to assess the demand that the proposed development will place on the relevant water systems.

An Equivalent Tenement (ET) is the basic unit of measure to quantify the demand on water supply systems. One ET represents the equivalent demand from a standard detached residential dwelling.

To assist with the assessment of water demand, RWCC uses the NSW Water Directorate's Guidelines for Determining Water ET Figures. The Water Directorate guidelines are available through the following URL:

https://www.waterdirectorate.asn.au/Bookshop/Section64DeterminationsofEquivalentTenementsGuidelines2017.aspx

In the case of non-residential developments, the Water Directorate Standard ETs must be factored to determine RWCC's Local ET. All Water Directorate non-residential ET are to be multiplied by 0.7 to determine the RWCC Local ET.

When applying the estimated average water consumption for non-typical developments under the Water Directorate Guidelines, non-residential ET's are calculated by dividing the development's assessed peak day demand by 3.8 kL. This method is only used when the Water Directorate Guidelines (Table 2 or 3 of the guidelines) don't include that category of development.

Credit for existing use is inherent in the calculation of the ET loading, as the developer charges are levied for the additional ET loadings that a development will place on the infrastructure. For example, if a single residential lot is subdivided into four residential lots, the development has a credit of one ET from the existing use. The developer charges will be applied for the three additional ETs.

8.9 Exemption of Developer Charges

Under section 306 (4) and (5) of the Water Management Act 2000, the Minister for Urban Affairs & Planning may make a determination with regard to developer charges.

9 Reference Documents

Background information and calculations relating to this DSP are provided in the following documents:

2016 Developer Charges Guidelines for Water Supply, Sewerage and Stormwater, published by Department of Primary Industries - Water

RWCC DSP Background Document for Water Supply (Appendix A)

RWCC Strategic Business Plan (including RWCC Financial Plan), November 2012

RWCC Integrated Water Cycle Management Strategy, 2021

RWCC Demand Management Plan, 2012

RWCC Asset Management Plan, 2021

Note: These background documents contain detailed calculations for the capital charges and developer charges, including asset commissioning dates, size/length of assets, MEERA valuation of assets, 30 years capital works program, assets current and future capacities

Appendix A

RWCC DSP Background Document for Water Supply

Table 1: Existing Water Supply Assets

Asset/Project	Year of Construction	Value	Growth Component	Age	Useful Life	Remaining Life	Remaining Value	Annual Cost (Rem Val/Rem Life)	Notes
Wagga WTP	2018	$35,456,653	52%	4	70	66	$17,383,890.44	$263,392.28	26ML to 55ML
WTP design & PM	2018	$3,561,441	52%	4	70	66	$1,746,123.64	$26,456.42	26ML to 55ML
Lamellar clarifiers & variations	2018	$2,542,137	52%	4	70	66	$1,246,373.45	$18,884.45	26ML to 55ML
Glenoak Reservoir	2019	$2,031,000	100%	3	100	97	$1,970,070.00	$20,310.00	New 4.5ML
Low Level Reservoirs	2019	$6,072,000	0%	3	100	97	$0.00	$0.00	Reduced capacity
Mangoplah Reservoir	2013	$528,000	67%	9	100	91	$321,921.60	$3,537.60	44kL to 135kL
Rural Reservoir (Dunns Rd)	2018	$2,159,000	10%	4	100	96	$207,264.00	$2,159.00	4.5ML to 5ML
Red Hill Reservoir # 3	2011	$1,650,000	100%	11	100	89	$1,468,500.00	$16,500.00	New 11ML
Collingullie Reservoir	2016	$528,000	74%	6	100	94	$367,276.80	$3,907.20	180kL to 700kL
Woomargama Reservoir	2016	$115,000	0%	6	100	94	$0.00	$0.00	120kL - no increase
Morundah Reservoir	2015	$415,000	42%	7	100	93	$162,099.00	$1,743.00	77.35kL to 135kL
Southern Trunk (WW to Res)	2015	$5,242,000	31%	7	75	68	$1,473,351.47	$21,666.93	375mm to 450mm DICL
West Wagga Shires Pump upgrade	2015	$829,000	44%	7	50	43	$313,693.60	$7,295.20	Growth %
The Rock to Milbrulong BT	2018	$1,295,000	44%	4	50	46	$521,237.50	$11,331.25	150mm to 200mm OPVC
Milbrulong BT to Lockhart	2020	$1,046,000	55%	2	50	48	$552,288.00	$11,506.00	200mm to 300mm OPVC
Estella PH to Estella Res	2020	$2,661,000	100%	2	75	73	$2,590,040.00	$35,480.00	New 450mm DICL
Glenoak Reservoir (original)	2001	$252,000	100%	21	100	79	$199,080.00	$2,520.00	New 1.3 ML
Glenoak Pumphouse	2001	$35,000	100%	21	50	29	$20,300.00	$700.00	New
Urana raw water pipeline	2010	$2,000,000	10%	12	50	38	$152,000.00	$4,000.00	200mm
Urana raw water pump station	2010	$400,000	10%	12	50	38	$30,400.00	$800.00	
Boorooma 2 & 3	2014	$152,706	$20,676	8	50	42	$20,676	$492.29	
Boorooma 3 & 4A	2015	$77,748	$8,589	7	50	43	$8,589	$199.74	

Boorooma 5	2017	$96,008	$13,593	5	50	45	$13,593	$302.07	
Boorooma 7	2019	$107,960	$47,106	3	50	47	$47,106	$1,002.26	
Cooramin St 1	2017	$8,951	$1,669	5	50	45	$1,669	$37.09	
Farrer Rd 4	2016	$34,567	$10,463	6	50	44	$10,463	$237.80	
Bourkelands 20C	2014	$29,500	$6,601	8	50	42	$6,601	$157.17	
Bourkelands 20D	2014	$32,230	$7,091	8	50	42	$7,091	$168.83	
Bourkelands 24A	2015	$55,263	$9,947	7	50	43	$9,947	$231.33	
Staunton Estate 1	2015	$78,750	$25,387	7	50	43	$25,387	$590.40	
Brunslea Park 12	2015	$44,555	$731	7	50	43	$731	$17.00	
Brunslea Park 13	2015	$40,820	$4,278	7	50	43	$4,278	$99.49	
Brunslea Park 14A	2018	$67,699	$1,029	4	50	46	$1,029	$22.37	
58 Harris Rd 1	2020	$108,847	$19,368	2	50	48	$19,368	$403.50	
58 Harris Rd 2	2021	$71,404	$7,752	1	50	49	$7,752	$158.20	
86 Harris Rd 1	2021	$128,387	$33,786	1	50	49	$33,786	$689.51	
Estella Heights 1	2017	$76,060	$3,803	5	50	45	$3,803	$84.51	
Estella Heights 2	2018	$48,245	$1,447	4	50	46	$1,447	$31.46	
Estella Heights 4	2019	$106,689	$32,007	3	50	47	$32,007	$681.00	
Estella Rise 1B	2014	$92,088	$17,497	8	50	42	$17,497	$416.60	
Estella Rise 3A	2015	$140,995	$32,429	7	50	43	$32,429	$754.16	
Estella Rise 3B	2016	$59,802	$11,363	6	50	44	$11,363	$258.25	
Estella Rise 4 & 6	2018	$155,054	$34,112	4	50	46	$34,112	$741.57	
Estella Rise 2	2015	$106,345	$3,190	7	50	43	$3,190	$74.19	
Estella Rise 5	2016	$60,624	$7,882	6	50	44	$7,882	$179.14	
Crooked Creek 1	2017	$127,234	$41,655	5	50	45	$41,655	$925.67	
Governors Hill 2	2015	$43,422	$6,278	7	50	43	$6,278	$146.00	
Governors Hill 3	2017	$157,796	$45,322	5	50	45	$45,322	$1,007.16	
Governors Hill 5	2020	$103,855	$32,619	2	50	48	$32,619	$679.56	
Lloyd 2	2015	$35,549	$4,266	7	50	43	$4,266	$99.21	
Lloyd 3	2018	$34,482	$8,965	4	50	46	$8,965	$194.89	
Lloyd 7	2018	$140,556	$21,024	4	50	46	$21,024	$457.04	
Lloyd 8 & 9	2019	$283,539	$101,844	3	50	47	$101,844	$2,166.89	
Lloyd Wets 4A	2017	$78,749	$4,725	5	50	45	$4,725	$105.00	
Springvale Heights	2021	$97,097	$43,374	1	50	49	$43,374	$885.18	

Urana St 1	2016	$81,560	$22,181	6	50	44	$22,181	$504.11	
Urana St 2	2018	$49,098	$8,561	4	50	46	$8,561	$186.11	
Tatton 10	2008	$42,949	$34,359	14	50	36	$34,359	$954.42	
Tatton 11	2009	$106,848	$89,040	13	50	37	$89,040	$2,406.49	
Tatton 12A	2011	$144,474	$131,340	11	50	39	$131,340	$3,367.69	
Jacob Wenke 1	2019	$23,773	$11,672	3	50	47	$11,672	$248.34	
Bourkelands 1	2011	$16,905	$14,700	11	50	39	$14,700	$376.92	
Bourkelands 18a	2006	$24,138	$20,115	16	50	34	$20,115	$591.62	
Bourkelands 19	2007	$24,717	$22,470	15	50	35	$22,470	$642.00	
Bourkelands 21a	2010	$16,170	$15,400	12	50	38	$15,400	$405.26	
Bourkelands 22	2008	27951	$25,410	14	50	36	$25,410	$705.83	
Bourkelands 23	2008	26040	$21,700	14	50	36	$21,700	$602.78	
Hilltop 7	2008	$18,480	$16,800	14	50	36	$16,800	$466.67	
Hilltop 8	2010	$57,288	$47,740	12	50	38	$47,740	$1,256.32	
Lloyd 4	2007	$58,464	$48,720	15	50	35	$48,720	$1,392.00	
Glenoak 4	2004	$62,388	$54,250	18	50	32	$54,250	$1,695.31	
Glenoak 3	2003	$30,564	$27,785	19	50	31	$27,785	$896.29	
Glenoak 1	2008	$51,660	$43,050	14	50	36	$43,050	$1,195.83	
Tatton 8 & 9	2008	$71,555	$59,629	14	51	37	$59,629	$1,611.59	

Table 2: 30 Year Capital Works Program

Project/Work Order #	Project/Work Order Name	ILOS %	GROWTH %	RENEW %	Legislative / Governance %	check sum %	Financial Year	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40	2040/41	2041/42	2042/43	2043/44	2044/45	2045/46	2046/47	2047/48	2048/49	2049/50
	MANAGEMENT						**MANAGEMENT TOTAL**	**915,000**	**3,330,000**	**2,070,000**	**2,550,000**	**2,860,000**	**1,160,000**	**700,000**	**0**	**0**	**0**	**439,000**	**200,000**	**225,000**	**240,000**	**0**	**20,000**	**0**	**20,000**	**100,000**	**130,000**	**0**	**75,000**	**10,000**	**0**	**20,000**	**0**	**0**	**145,000**	**50,000**	**20,000**
	Workshops																																		
	Administration Building																																		
1	Carpark - Admin Building	100%		0%	0%	100%		60,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60,000	0	0	0	0	0	0	0	0
71	Administration Office	80%		0%	20%	100%		100,000	200,000	0	0	0	0	0	0	0	0	200,000	0	0	0	0	20,000	0	0	0	20,000	0	0	0	0	20,000	0	0	0	20,000
	Depot Buildings																																		
228	Refurbishment of Operations Office - Urban	40%		50%	10%	100%		120,000	1,040,000	500,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20,000	0	0	0	20,000	0	0	0	20,000	0	0	0
NEW	Refurbishment of Old Waterworks Office	0%		100%	0%	100%		0	0	10,000	150,000	150,000	150,000	0	0	0	0	0	0	25,000	0	0	0	0	0	0	0	0	25,000	0	0	0	0	0	0	0
132	Redevelopment of Depot, The Rock- Non-Urban	40%		50%	10%	100%		180,000	500,000	300,000	0	500,000	0	0	0	0	0	0	0	0	10,000	0	0	0	0	0	0	0	0	10,000	0	0	0	0	0	0
	Awning on stores building	50%		0%	50%	100%		0	30,000		300,000	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
156	Kooringal Road Purchase	100%		0%	0%	100%		5,000	260,000	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
288	Kooringal Road Storage Area	100%		0%	0%	100%		10,000	250,000	0	250,000	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
287	Forge & Copland Street Development	100%		0%	0%	100%		10,000	250,000	500,000	0	500,000	0	500,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Access, Parking & Landscaping																																		
155	Levee protection stage 2 Hammond Ave - Urban	50%		50%	0%	100%		0	0	0	0	0	0	0	0	0	0		0	100,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Environmental Works																																		
NEW	Murrumbidgee River Bank Stabilisation	0%		100%	0%	100%		50,000	0	0	1,000,000	1,000,000	0	0	0	0	0	100,000	0	0	0	0	0	0	0	100,000	0	0	0	0	0	0	0	100,000	0	0
NEW	Marshalls Creek Bank Stabilisation	0%		100%	0%	100%		50,000	0	0	0	500,000	0	0	0	0	0		50,000	0	0	0	0	0	0	0	50,000	0	0	0	0	0	0	0	50,000	0
NEW	Re-use of super natent non-potable water on Hammond Ave site	0%		100%	0%	100%		0	50,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25,000	0	0
NEW	Demolition of abandoned raw water river intakes	0%		100%	0%	100%		0	0	300,000	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
	Depot Residence																																		
78	Depot Residence - Urban	0%		100%	0%	100%		30,000	150,000	0	0	0	0	0	0	0	0	139,000	0	30,000	0	0	0	0	0	0	0	0	30,000	0	0	0	0	0	0	0
	Repurposing Operational Assets																																		
NEW	Repurpose waterworks buildings inc wells, workshops,skillion	0%		100%	0%	100%		0	0	10,000	200,000	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
NEW	Demolition Rural pumphouse	0%		100%	0%	100%		50,000	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	0
NEW	Demolition of Kooringal pumphouse & main SB relocation	0%		100%	0%	100%		10,000	500,000	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
NEW	Demolition of Chlorine storage shed	0%		100%	0%	100%		20,000	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	0
NEW	Demolition Chemical Dosing buildings	0%		100%	0%	100%		20,000	0	0	0	0	500,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NEW	Demolition or Reburbish shed over round well	0%		100%	0%	100%		0	0	0	0	0	10,000	200,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NEW	Repurpose Boiler house and filter area	0%		100%	0%	100%		0	0	0	0	10,000	500,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Main 10MG (45ML) Low Level Reservoir Repurposing	40%		30%	30%	100%				250,000	250,000																									
	Asset Demolition																																		
	Humula Steel (Abandoned) Reservoir	0%		0%	100%	100%		50,000	0	0	0	0	0	0	0	0	0																		
	Morundah Steel (Abandoned) Reservoir	0%		0%	100%	100%		50,000	0	0	0	0	0	0	0	0	0																		
	Mangoplah (Abandoned) Reservoirx2	0%		0%	100%	100%		50,000	0	0	0	0	0	0	0	0	0																		
	Red Hill No.1 Steel (Abandoned) Reservoir	0%		0%	100%	100%		50,000	0	0	0	0	0	0	0	0	0																		
	Millswood (Abandoned) Reservoirx2	0%		0%	100%	100%		0	50,000	0	0	0	0	0	0	0	0																		
	Bomen No.1 Steel (Abandoned) Reservoir	0%		0%	100%	100%		0	50,000	0	0	0	0	0	0	0	0																		
	Ladysmith Low Level (Abandoned) Reservoir x 3	0%		0%	100%	100%		0	0	0	50,000	0	0	0	0	0	0																		
	San Isadore (Future Abandoned) Reservoirx2	0%		0%	100%	100%		0	0	0	50,000	0	0	0	0	0	0																		
	Beauty Point No2 (Future Abandoned) Reservoir	0%		0%	100%	100%		0	0	0	150,000	0	0	0	0	0	0																		
	The Rock (Future Abandoned) Reservoir	0%		0%	100%	100%		0	0	0	0	0	0	0	0	0	0		150,000																
	Beauty Point No1 (Abandoned) Reservoir	0%		0%	100%	100%		0	0	0	150,000	0	0	0	0	0	0																		
	Mt Austin No2 (Buckmans) Reservoir	0%		0%	100%	100%		0	0	0	0	0	0	0	0	0	0				150,000														
	Square Reservoir (and maybe Round Res too) retain for heritage p	0%		0%	100%	100%		0	0	0	0	0	0	0	0	0	0																		
	Uranquinty elevated reservoir	0%		0%	100%	100%		0	0	200,000	0	0	0	0	0	0	0																		
	Wallbundrie WTP, Raw Water Dam and Billabong Crk intake	0%		0%	100%	100%		0	0	0	0	50,000	0	0	0	0	0																		
	Rand WTP, Raw Water Dam and Billabong Crk intake	0%		0%	100%	100%		0	0	0	0	50,000	0	0	0	0	0																		
	Rand Raw Water Storage Dam	0%		0%	100%	100%		0	0	0	0	50,000	0	0	0	0	0																		
	Rand Sediment lagoon	0%		0%	100%	100%		0	0	0	0	50,000	0	0	0	0	0																		
	Mangoplah LL Pump Station and LL Tanks	0%		0%	100%	100%		0	0	0	0	0	0	0	0	0	0			30,000															
	French Park Pump station	0%		0%	100%	100%		0	0	0	0	0	0	0	0	0	0			20,000															
	Boree Crk Pump Station	0%		0%	100%	100%		0	0	0	0	0	0	0	0	0	0			20,000															
	Mountain View Pump Station	0%		0%	100%	100%		0	0	0	0	0	0	0	0	0	0				80,000														
	PLANT & EQUIPMENT						**PLANT & EQUIPMENT TOTAL**	**3,992,623**	**6,554,000**	**19,214,000**	**1,279,000**	**1,264,000**	**1,534,000**	**1,364,000**	**1,654,000**	**1,664,000**	**1,649,000**	**2,791,000**	**1,975,000**	**1,975,000**	**1,475,000**	**1,550,000**	**1,475,000**	**1,475,000**	**1,475,000**	**1,475,000**	**2,791,000**	**1,475,000**	**1,475,000**	**1,475,000**	**1,475,000**	**1,550,000**	**2,975,000**	**2,975,000**	**1,475,000**	**1,475,000**	**2,791,000**
	IT Equipment																																		
50	Computer Server Replacements -Urban			100%		100%		2,105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000
51	Computer Equipment - Urban			100%		100%		139,000	139,000	139,000	139,000	139,000	139,000	139,000	139,000	139,000	139,000	1,380,000	139,000	139,000	139,000	139,000	139,000	139,000	139,000	139,000	1,380,000	139,000	139,000	139,000	139,000	139,000	139,000	139,000	139,000	1,380,000
	Photocopiers																																		
	Digial Phone System																																		
	Mobile Phones																																		
	Corporate software																																		
	Office Furniture & Equipment																																		
52	Office Furniture & Equipment - Urban	10%	10%	60%	20%	100%		8,623	0	0	0	0	0	0	0	0	0	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
	Office Furniture & Equipment - Non Urban	10%	10%	60%	20%	100%																													
	Working Plant & Vehicle Purchases																																		
54	Routine plant & vehicle replacements	5%	5%	85%	5%	100%		1,130,000	960,000	945,000	985,000	995,000	1,190,000	1,095,000	1,360,000	1,395,000	1,380,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
55	**Fixed Plant Tools & Equipment**																																		
	Fixed Plant Tools & Equipment - Urban	5%	5%	85%	5%	100%		35,000	0	0	0	0	50,000	0	0	0	0	50,000	0	0	0	50,000	0	0	0	0	50,000	0	0	0	0	50,000	0	0	0	0	50,000
	Fixed Plant Tools & Equipment - Non Urban	5%	5%	85%	5%	100%																													
	Telemetry & Control Systems Upgrade																																		
133	Radio Telementry RTUs SCADA Upgrade	10%	10%	80%	0%	100%		405,000	250,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
224	Digital Communication Upgrade (Comms Backbone)	0%	0%	100%	0%	100%		120,000	100,000	0	25,000	0	25,000	0	25,000	0	0	25,000	0	0	0	25,000	0	0	0	0	25,000	0	0	0	0	25,000	0	0	0	0	25,000
	Energy Efficiency & Cost Minimisation																																		
	Admin Bulding Solar	100%				100%		50,000																											
290	Solar Pilot plant - East Wagga	100%				100%			5,000,000	18,000,000	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
	Solar Replacements & Upgrades	10%		90%		100%													500,000	500,000												1,500,000	1,500,000				
	SOURCES						**SOURCES TOTAL**	**365,000**	**380,000**	**377,000**	**1,030,000**	**100,000**	**30,000**	**85,000**	**1,010,000**	**95,000**	**25,000**	**300,000**	**1,085,000**	**70,000**	**50,000**	**100,000**	**1,020,000**	**10,000**	**85,000**	**20,000**	**1,015,000**	**75,000**	**30,000**	**10,000**	**1,115,000**	**15,000**	**30,000**	**85,000**	**1,010,000**	**300,000**	**105,000**
	Additional Water Licenses	100%	0%	0%	0%	100%		0	0	0	1,000,000				1,000,000				1,000,000				1,000,000				1,000,000				1,000,000				1,000,000		
	Bores-renew/refurbish/decommission																																		

213	Bores-renew/refurbish/decommission - Urban	10%	5%	85%		100%																													
192	Wagga Bore Motor Replacement (132kW)	0%	0%	100%	0%	100%		75,000	0	75,000	0	75,000	0	75,000	0	75,000	0	0	75,000	0	0	75,000	0	0	75,000	0	0	75,000	0	0	75,000	0	0	75,000	0	0	75,000
260	North Wagga Bore 1 Gantry Modifications	0%	0%	100%	0%	100%		40,000	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	0
214	Bores-renew/refurbish/decommission - Non-Urban																		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NEW	Oura Bore 2 Reline and riserless	30%		70%		100%				160,000																											
	Tarcutta Bore 5 Replacement (WTP site)	10%	20%	70%		100%		10,000	300,000																			20,000									
	Humula Bore	10%		90%		100%														50,000																	
	Woomargama	10%		90%		100%																								20,000							
NEW	Woomargama Bore #2 (replace abandoned spear points)	0%	0%	100%	0%	100%		0	10,000	120,000	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	20,000	0	0	0	0	0
	Ralvona	10%		90%		100%															20,000																
NEW	Ralvona Bore 2B - Riserless upgrade	0%	0%	100%	0%	100%		60,000	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	0
	Walbundrie	10%		90%		100%						20,000																									
	Walla Walla	10%		90%		100%																												10,000	300,000		
	Collingullie	15%		85%		100%									10,000	300,000																					
	Bulgary	15%		85%		100%																															10,000
NEW	Bulgary Bore 3B - Reline & Riseless	0%	0%	100%	0%	100%		180,000	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	0
174	Switchboards Improvements/Replacements																																				
	West Wagga x 4	10%		90%		100%					20,000				20,000									20,000						20,000							20,000
	North Wagga x3	10%		90%		100%																															
	East Wagga x3	10%		90%		100%						15,000				15,000						15,000				15,000					15,000						
	Oura Bore 2 Switchboard & Electrical upgrade	10%		90%		100%			30,000														10,000									10,000					
	Tarcutta x2	10%		90%		100%												10,000											10,000								
	Humula x3	10%		90%		100%														10,000										10,000							
	Woomargama x2	10%		90%		100%								10,000									10,000														
	Ralvona x3	10%		90%		100%							10,000											10,000										10,000				
	Walbundrie x2	10%		90%		100%						10,000										10,000																
	Walla Walla x2	10%		90%		100%				10,000										10,000																		
	Collingullie x2	10%		90%		100%					10,000											10,000																
	Bulgary x2	10%		90%		100%						10,000												10,000														
	Soureworks Metering (governance)																																				
NEW	Yanco Creek - Morundah				100%	100%			7,000																												
NEW	Woomargama Bores				100%	100%			7,000																												
NEW	Tarcutta Bores				100%	100%			7,000																												
NEW	Goldenfields Bulk Meter				100%	100%				12,000																											
NEW	Oura Bores				100%	100%			12,000																												
NEW	Humula Bores & Well				100%	100%			7,000																												
	TREATMENT PLANTS						**TREATMENT PLANTS TOTAL**	**4,813,000**	**2,075,000**	**2,715,000**	**910,000**	**140,000**	**100,000**	**60,000**	**55,000**	**1,070,000**	**5,047,000**	**5,285,000**	**15,000**	**110,000**	**60,000**	**150,000**	**135,000**	**157,000**	**10,000**	**165,000**	**155,000**	**470,000**	**40,000**	**57,000**	**45,000**	**145,000**	**100,000**	**40,000**	**5,000**	**42,000**	**365,000**
	Aeration Tower Replacements																																				
262	Ralvona Aeration Tower Replacement	20%		80%		100%		60,000	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	0	100,000
NEW	North Wagga Aeration Tower replacement	20%		80%		100%		0	0	0	0	0	0	0	0	0	0	0	0	100,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100,000
	Walbundrie Aeration Tower Replacement	20%		80%		100%																															
	Bulgary Aeration Tower Replacement	20%		80%		100%																															
	Aeration Tower Covers																																				
89	East Wagga Aeration Basin cover	0%	0%	100%	0%	100%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50,000	0	0	0	0	0	0	0	0	0	0
217	Bulgary Aeration Cover	0%	0%	100%	0%	100%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25,000	0	0	0	0	0	0	0	0	0
218	Ralvona Aeration Cover	0%	0%	100%	0%	100%		60,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40,000	0	0	0	0	0	0	0	0
263	West Wagga Aeration Roof Replacement / Cover	0%	0%	100%	0%	100%		108,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20,000	0	0	0	0	0	0	0	0	0	0
233	Gardners Crossing Aeration Cover	0%	0%	100%	0%	100%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25,000	0	0	0	0	0	0	0	0	0	0
	North Wagga Shade cloth replacement									100,000																											
	Treatment Plant Specific Improvments																																				
291	Gas Chlorination Replacements	10%		80%	10%	100%		15,000	15,000	0	0	0	0	30,000	15,000	15,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
178	Online & Remote Monitoring	10%		80%	10%	100%		15,000	15,000	0	15,000	0	15,000	0	15,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
320	Tarcutta WTP levee protection	100%				100%		0	25,000	225,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30,000	0	0	0	0	0	0	0	0	0	0
	Treatment Plant refurbishments																																				
137	Wagga Filtration Water Treatment Plant stage 1 - Urban			100%		100%		3,750,000	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	0	0
292	Roads			100%		100%		400,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100,000	0	0	0	0	0	0	0	0	0	0	0
293	Footpaths and covered walkways			100%		100%		100,000	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	0	0
294	Landscaping			100%		100%		100,000	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	0	0
NEW	Relining of Thickener (old clarifier 1)			100%		100%		0	0	150,000	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
NEW	Relining of Wastewater Holding Tank (old clarifier 2)			100%		100%		0	0	0	150,000	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
	Wagga Filtration Water Treatment Plant - Stage 2 (3rd clarifier&filters)		80%		20%	100%									1,000,000	5,000,000	5,000,000																				
	Wagga Filtration Water Treatment Plant	10%		80%	10%	100%						50,000					50,000					50,000				50,000					50,000						
NEW	North Wagga Aeration WTP	0%	25%	75%	0%	100%		0	0	0	25,000	0	0	0	0	25,000	0	0	0	0	25,000	0	0	0	0	25,000	0	0	0	0	25,000	0	0	0	0	25,000	0
295	North Wagga Fluoridation Plant			80%	20%	100%		185,000																													
	West Wagga Aeration WTP	10%		80%	10%	100%						25,000	0	0	0	0	25,000	0	0	0	0	25,000	0	0	0	0	25,000	0	0	0	0	25,000	0	0	0	0	25,000
265	West Wagga Fluoridation Plant			80%	20%	100%			175,000																												
	East Wagga Aeration WTP	10%		80%	10%	100%																															
NEW	Our WTP Upgrade Iron Removal	40%		60%		100%				50,000	500,000																										
	Oura Aeration WTP	10%		80%	10%	100%							15,000										15,000										15,000				
	Humula Well WTP	10%		80%	10%	100%		10,000	80,000					5,000						5,000					5,000							5,000					
	Humula Bore WTP	10%		80%	10%	100%																															
	Woomargama WTP	10%		80%	10%	100%							5,000					5,000					5,000					5,000					5,000				
219	Woomagama WTP Replacement	40%		50%	10%	100%		10,000	200,000	0	0	0	0	0	0	0	0	0	0	0	0	0	80,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CALC	Ralvona Aeration WTP	10%		80%	10%	100%		0	0	0	0	0	0	0	0	0	100,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CALC	Walbundrie Aeration WTP	10%		80%	10%	100%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CALC	Bulgary Aeration WTP	10%		80%	10%	100%		0	0	0	0	0	0	0	0	0	100,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
297	Bulgary Fluoridation Plant			80%	20%	100%				55,000																											
CALC	Collingullie WTP	10%		80%	10%	100%		0	0	0	0	100,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100,000	0	0	0	0	0	0	0
CALC	Tarcutta WTP	10%		80%	10%	100%		0	10,000	0	0	0	0	0	10,000	0	0	0	0	0	10,000	0	0	0	0	0	10,000	0	0	0	0	10,000	0	0	0	0	0
NEW	Tarcutta Manganese Filter Replacement	10%		90%		100%			40,000	0	0	0	0	0	0	0	0	0	0	0	0	0	40,000	0	0	0	0	0	0	0	0	0	0	0	0	0	40,000
298	Tarcutta Iron Filter Replacement	0%		100%		100%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	100,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100,000
	Urana Filtration WTP	10%		80%	10%	100%									10,000							10,000				10,000							10,000				
99	Urana WTP replacement	10%	0%	80%	10%	100%		0	1,500,000	1,500,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	250,000	0	0	0	0	0	0	0	0	0	0
100	Morundah Filtration WTP Replacement	0%		100%		100%		0	0	500,000	200,000	0	0	0	0	0	7,000	0	0	0	0	0	0	7,000	0	120,000	0	0	0	7,000	0	0	0	0	7,000	0
	Gardiners Crossing Aeration WTP	10%		80%	10%	100%																										5,000				
296	Gardiners Crossing Fluoridation Plant			80%	20%	100%				125,000																											
195	**Laboratory Equipment**																																				
BaU	Water Quality Common Testing Facility	10%		80%	10%	100%			15,000			15,000				15,000							15,000				15,000					15,000					
BaU	Wagga Filtration WTP	10%		80%	10%	100%					10,000				10,000					10,000					10,000				10,000					10,000			
BaU	West Wagga Aeration WTP	10%		80%	10%	100%						10,000				10,000					10,000				10,000					10,000							
BaU	North Wagga Aeration WTP	10%		80%	10%	100%							10,000				10,000					10,000				10,000					10,000						

BaU	Oura WTP	10%		80%	10%	100%					5,000					5,000					5,000							5,000					5,000					
BaU	Tarcutta WTP	10%		80%		100%		5,000						5,000					5,000						5,000					5,000								
BaU	Humula Well WTP	10%		80%		100%			5,000						5,000						5,000					5,000					5,000							
BaU	Ralvona WTP	10%		80%	10%	100%				5,000						5,000						5,000					5,000					5,000						
BaU	Woomargama WTP	10%		80%	10%	100%					5,000						5,000						5,000					5,000					5,000					
BaU	Walbundrie Aeration WTP	10%		80%	10%	100%																																
BaU	Urana WTP	10%		80%	10%	100%					5,000					5,000						5,000					5,000					5,000						
BaU	Bulgary Aeration WTP	10%		80%	10%	100%			5,000				5,000				5,000						5,000					5,000										
BaU	Collingullie Aeration WTP	10%		80%	10%	100%				5,000				5,000				5,000						5,000					5,000									
BaU	Gardiners Crossing Aeration WTP	10%		80%	10%	100%						5,000					5,000						5,000										5,000					
	PUMPING STATIONS						**PUMP STATIONS TOTAL**	**285,000**	**90,000**	**2,150,000**	**90,000**	**885,700**	**255,000**	**0**	**684,200**	**170,000**	**684,400**	**0**	**684,400**	**165,200**	**45,000**	**115,000**	**750,000**	**15,000**	**25,000**	**165,000**	**0**	**15,000**	**175,000**	**0**	**20,000**	**15,000**	**333,800**	**100,000**	**45,000**	**15,000**	**255,000**		
	Pump Stations Renewal/Refurbish/Upgrade																																					
~~300~~	~~Bellevue Pump Station~~	~~10%~~		~~80%~~	~~10%~~	~~100%~~		~~60,000~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~25,000~~	~~0~~	~~0~~	~~0~~	~~0~~		
MODEL	Bellevue pumpstation - Upgrade	10%	80%		10%	100%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	700,000	0	0	0	0	0	0	0	0	0	0	0	0		
301	Estella Pump Station - Upgrade (power)	10%	80%	0%	10%	100%		120,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25,000	0	0	0	0	0	0	0	0	0	0	25,000		
MODEL	Estella Pump Station - Upgrade for growth		25%	75%		100%		0	0	1,150,000	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
NEW - 302																																						
	North Wagga CWS Pump Station - Replacement & Improvements	40%	50%	0%	10%	100%		0	0	0	0	750,000	0	0	0	0	0	0	0	0	0	50,000	0	0	0	0	0	0	0	0	50,000	0	0	0	0		
Model	Bomen pump station		100%			100%		50,000	0	1,000,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	150,000	0	0	0	0	0	0	0	0		
BaU	Pleasant Hills Pump Station Refurbishment	10%		80%	10%	100%		0	90,000	0	0	0	0	0	0	0	0	0	0	25,000	0	0	0	0	0	0	0	0	0	25,000	0	0	0	0		
MODEL	East Bomen pumpstation - Upgrade	10%	80%		10%	100%		0	0	0	0	0	0	0	0	0	0	684,400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
BaU	Holbrook HL Pump Station BaU	50%	50%	0%	0%	100%		0	0	0	0	0	0	0	0	0	0	0	0	0	15,000	0	0	0	0	0	0	0	15,000	0	0	0	0	0		
MODEL	Holbrook HL Pump Station	50%	50%	0%	0%	100%		0	0	0	0	135,700	0	0	0	0	0	0	0	0	0	0	0	15,000	0	0	0	0	0	0	0	0	15,000	0		
BaU	Ralvona WTP CWS Pump Station - Refurbishment	10%		80%	10%	100%					90,000																										
BaU	Ralvona WTP CWS Pump Station	10%		80%	10%	100%																25,000										25,000				
BaU	Morven Pump Station Refurbishment	50%	50%	0%	0%	100%		0	0	0	0	0	0	0	0	30,000	0	0	0	0	0	0	0	0	0	0	15,000	0	0	0	0	0	0	0		
MODEL	10MG HL pumpstation upgrade	10%	60%	30%		100%		0	0	0	0	0		0	684,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
MODEL	Ladysmith pumpstation - Upgrade	10%	40%	50%		100%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94,400	0	0	0	0	0		
BaU	Ladysmith pumpstation	10%	10%	80%		100%		0	0	0	0	0	25,000	0	0	0	0	0	0	0	0	0	25,000	0	0	0	0	0	0	94,400	0	0	0	0	0		
MODEL	Glenoak pumpstation - Upgrade		25%	75%		100%		0	0	0	0	0	0	0	0	0	684,400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
BaU	Glenoak pumpstation	10%	80%	10%		100%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25,000	0	0	0	0	0	0	0		
MODEL	Brucedale pumpstation - Upgrade	10%	80%	10%		100%		0	0	0	0	0	0	0	0	0	0	0	165,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
BaU	Brucedale pumpstation	10%	10%	80%		100%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20,000	0	0	0	0	0		
MODEL	Downside pumpstation - NEW	10%	90%			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	0	0	230,000		
MODEL	Mangoplah pumpstation - Upgrade	10%	80%	10%		100%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95,000	0	0	0	0	0		
BaU	Mangoplah pumpstation	10%	10%	80%		100%		0	0	0	0	0	0	0	0	0	0	0	0	20,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
MODEL	Gardiners Crossing pumpstation - Upgrade	10%	80%	10%		100%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	165,000	0	0	0	0	0	0	0	0	0		
BaU	Gardiners Crossing pumpstation	10%	10%	80%		100%									0																		20,000				
MODEL	Urana WTP CWS pumpstation - Upgrade	10%	60%	30%		100%		0	0	refer WTP	0	0	0	0	0	0	0	0	0	0	25,000	0	0	0	0	0	0	0	0	25,000	0	0	0	0		
BaU	Urana WTP CWS pumpstation	10%	10%	80%		100%															25,000									25,000						
MODEL	Urana Terminal Res transfer		100%			100%		0	0	0	0	0	230,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
MODEL	Urana Res - Oaklands pump		50%	50%		100%		0	0	0	0	0	0	0	0	140,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
199	**Pump & Motor Maintenance / Replacements - Urban**	10%		90%		100%		30,000	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		
200	**Pump & Motor Maintenance / Replacements - Non-Urban**	10%		90%		100%		25,000	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		
	RESERVOIRS						**RESERVOIRS TOTAL**	**929,000**	**510,000**	**3,010,000**	**2,505,000**	**2,440,000**	**1,490,000**	**170,000**	**85,000**	**3,320,000**	**3,840,000**	**170,000**	**1,285,000**	**3,870,000**	**140,000**	**170,000**	**2,310,000**	**170,000**	**3,760,000**	**250,000**	**60,000**	**3,870,000**	**3,060,000**	**1,270,000**	**3,140,000**	**1,220,000**	**650,000**	**3,010,000**	**3,000,000**	**90,000**	**2,600,000**		
	General Improvements																																				
NEW	Reservoir Mixers - Urban & Non Urban	100%				100%		0	55,000	0	0	0	55,000	0	0	0	55,000	0	0	55,000	0	0	0	0	55,000	0	0	0	0	55,000	0	0	0	55,000	0		
204	Reservoir Hatches Upgrades for Water Quality	30%		50%	20%	100%		10,000	0	10,000	0	10,000		10,000	0	10,000	0	10,000	0	10,000	0	10,000	0	10,000	0	10,000	0	10,000	0	10,000	0	10,000	0	10,000	0		
NEW	Reservoir Access Security Enclosures & Cameras																																				
	Red Hill Res No.2	100%				100%		10,000		100,000																											
	Gregadoo Res	100%				100%		10,000				100,000																									
	Glenfield Res No.1	100%				100%			10,000					100,000																							
	Mount Austin Res No.1	100%				100%			10,000							100,000																					
	Bellevue Res No.1	100%				100%				10,000								100,000																			
	Bellevue Res No.2	100%				100%				10,000										100,000																	
	Glenoak Res No.1	100%				100%					10,000											100,000															
	Estella Res	100%				100%					10,000													100,000													
	East Bomen Res No.1	100%				100%						10,000														100,000											
	East Bomen Res No.2	100%				100%						10,000																100,000									
	New/Replacement Reservoirs																																				
	Walbundrie Reservoir No.2 Replacement	0%	0%	100%	0%	100%		150,000																													
	Humula Reservoir Replacement - min. 200kL	0%	0%	100%	0%	100%		150,000	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		
	Oura Reservoir Replacement 2x100kL with 1.2ML	0%	75%	25%	0%	100%		50,000	0	1,000,000	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		
MODEL	Proposed #1 Wagga HL Res (Forest Hill / Red Hill / Glenfield???)	10%	90%	0%	0%	100%		0	0	0	0	0	0	0	0	0	3,700,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
MODEL	Gregadoo Res # 2 - 2.1ML	10%	90%	0%	0%	100%		0	0	0	0	2,250,000		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
MODEL	Ladysmith HL #2 Res - 0.5ML	10%	90%	0%	0%	100%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	650,000	0	0	0	0		
MODEL	Glenoak #3 Res - 6.2ML	10%	90%	0%	0%	100%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,700,000	0	0	0	0	0	0	0	0	0	0		
MODEL	Proposed #2 HL Wagga Res (Forest Hill / Red Hill / Glenfield???)	10%	90%	0%	0%	100%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,700,000	0	0	0	0	0	0	0	0		
MODEL	East Bomen Res #3 - 6.0ML	10%	90%	0%	0%	100%		0	0	0	0	0	0	0	0	0	0	0	3,700,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
MODEL	Brucedale Res #2 - replacement/upgrade - 1.5ML	0%	50%	50%	0%	100%		0	0	0	1,200,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
MODEL	Downside Res #1 - 4ML	10%	90%	0%	0%	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	0	0	0	2,600,000	
MODEL	Uranquinty HL Res #2 - 2.0ML	10%	90%	0%	0%	100%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,250,000	0	0	0	0	0	0	0	0	0	0	0	0		
MODEL	Mangoplah HL Res #2 - 0.2ML	10%	90%	0%	0%	100%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	510,000	0	0	0	0		
MODEL	Urana Res Terminal - 1.0ML	10%	90%	0%	0%	100%		0	0	0	0	0	1,200,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
MODEL	Oaklands Res Terminal - 0.5ML	10%	90%	0%	0%	100%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	640,000	0	0	0	0		
MODEL	Collingullie #2 Res 1.5ML	10%	90%	0%	0%	100%		0	0	0	0	0	0	0	0	0	0	1,200,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
MODEL	Holbrook LL Res #2 - 1.0ML	10%	90%	0%	0%	100%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,200,000	0	0	0	0	0	0		
MODEL	Holbrook HL Res #2 - 1.0ML	10%	90%	0%	0%	100%		0	0	0	1,200,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
274	The Rock Reservoir South - 2.0ML	10%	80%	10%	0%	100%		320,000		1,800,000	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		
NEW	Additional Bomen Res - 1.4ML	10%	90%	0%	0%	100%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,000,000	0	0	0	0	0		
NEW	Additional Estella Res - 11ML	10%	90%	0%	0%	100%		0	0	0	0	0	0	0	0	3,000,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
NEW	The Gap/Currawarna Reservoirs Duplicaton	10%	90%	0%	0%	100%		0	150,000	0	0	0	150,000	0	0	150,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
NEW	Lockhart Reservoir - 2.5ML	10%		90%		100%		0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	3,000,000	0	0	0	0	0	0	0		
NEW	Henty BT Replacement - 4.5ML	10%		90%		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	3,000,000	0			
NEW	Milbrulong BT Replacement - 4.5ML	10%		90%		100%																											3,000,000				
	Reservoirs - Refurbish																																				
	Wagga LL Valve House (Round/Square Res site)	0%		100%	0%	100%		200,000	200,000	0	0	0	0	0	0	0	0																				

	Reservoirs - Protective Treatment																																					
	Reservoirs - Upgrade Ladders and Access																																					
116	Reservoirs- upgrade ladders and access - Urban			50%	50%	100%		15,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000					
BaU	TBA																																					
BaU	TBA																																					
BaU	TBA																																					
BaU	TBA																																					
117	**Reservoirs- upgrade ladders and access - Non-Urban**			50%	50%	100%			30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000					
BaU	Brucedale Reservoir 1																																					
BaU	Currawarna Reservoir 1																																					
BaU	Pleasant Hill Reservoir																																					
BaU	Walbundrie Reservoir 1																																					
BaU	Walbundrie Reservoir 2																																					
BaU	Cottee Reservoir																																					
BaU	Tooyal Reservoir																																					
BaU	Woomargama Reservoir 2																																					
BaU	Ladysmith HL Reservoir 1																																					
BaU	Humula Reservoir 1																																					
BaU	Humula Reservoir 2																																					
BaU	Uranquinty HL Reservoir 1																																					
BaU	Mangoplah HL Reservoir 2																																					
BaU	Rand Reservoir 2																																					
207	**Reservoir Magflows - Urban**	90%			10%	100%		14,000																														
	Bellevue Reservoir 1	90%			10%	100%				20,000																												
208	**Reservoir Magflows - Non-Urban**	90%			10%	100%					25,000		25,000		25,000		25,000		25,000		25,000				25,000										25,000			
	Milbrulong Res inflow	90%			10%	100%																																
	Morven Res inflow	90%			10%	100%																																
	Tarcutta Reservoir Bi-flow	90%			10%	100%			25,000																													
	Humula Res Bi-flow	90%			10%	100%																																
	Brucedale Reservoir Bi-low	90%			10%	100%																																
	The Gap Res Bi-flow	90%			10%	100%																																
	Oura Res Bi-flow	90%			10%	100%																																
	MAINS, SERVICES & METERS						**MAINS, SEVICES & METERS TOTAL**	**6,565,000**	**6,618,600**	**4,477,286**	**9,621,059**	**11,359,919**	**12,058,869**	**16,272,907**	**15,512,036**	**10,631,257**	**11,065,569**	**8,599,975**	**9,389,475**	**11,329,070**	**15,923,760**	**15,483,598**	**11,918,584**	**16,403,720**	**12,519,007**	**15,954,447**	**14,230,041**	**12,105,792**	**13,151,700**	**14,987,767**	**12,053,994**	**15,210,384**	**14,126,938**	**11,253,658**	**12,100,544**	**14,647,600**	**10,819,826**
	Mains																																					
	System Improvements - Urban						**System Improvements - Urban**	**150,000**	**150,000**	**150,000**	**500,000**	**500,000**	**620,000**	**1,940,000**	**1,940,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**3,850,000**	**3,700,000**	**170,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**
145	System Improvements - Urban	50%		50%		100%		150,000	150,000	150,000	500,000	500,000	620,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	0	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
MODEL	Pine Gully Rd (A - B)		100%			100%																	170,000														
MODEL	Brucedale suction main		100%			100%								440,000																								
MODEL	Forest Hill Res rising main (Elizabeth Ave to res)		100%			100%															2,350,000																
MODEL	Forest Hill Res distribution main		100%			100%																2,200,000															
MODEL	Bomen Res rising main (G1 - H1)		100%			100%									440,000																							
	System Improvements - Non-Urban	25%					**System Improvements - Non-Urban**	**1,610,000**	**2,688,600**	**1,247,286**	**2,266,059**	**2,144,919**	**1,703,869**	**1,712,907**	**1,722,036**	**1,731,257**	**1,440,569**	**1,449,975**	**1,459,475**	**1,469,070**	**1,478,760**	**1,488,548**	**1,498,433**	**1,508,418**	**1,518,502**	**1,528,687**	**1,538,974**	**1,549,363**	**1,559,857**	**1,570,456**	**1,581,160**	**1,591,972**	**1,602,892**	**1,613,920**	**1,625,060**	**1,636,310**	**1,867,673**
146	System Improvements - Non-Urban	50%		50%		100%		50,000	50,000	100,000	150,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	50,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	0
NEW	Gosset Street			100%		100%		0	0		250,000	0	0	0	0	0	0																				
MODEL	Downside Res rising main		100%			100%																																720,000
MODEL	The Rock res offtake to reservoir		100%			100%																					70,000										
MODEL	The Rock res to township		100%			100%																					380,000										
304	San Isadore Main			100%		100%		0	0	0	0	0	0	0	0	0	0																				
275	Low Level Reservoirs Pipework	50%		50%		100%		0	0	0	0	0	0	0	0	0	0																				
276	WW WTP 600mm DICL Kooringal Rd	50%		50%		100%		200,000	1,000,000	0	0	0	0	0	0	0	0																				
NEW	Eldershaws Road, The Gap			100%		100%			320,000	0	0	0	0	0	0	0	0																				
NEW	Estella PH and Res	50%		50%		100%		500,000	0	0	0	0	0	0	0	0	0																				
251	East Wagga Raw Water Rising Main Scour	50%		50%		100%		0	0	0	0	0	0	0	0	0	0																				
277	Estella to CSU 450mm DICL	50%		50%		100%		0	0	0	0	0	0	0	0	0	0																				
NEW	River Rd, Alfredtown			100%		100%		0	0	0		300,000	0	0	0	0	0																				
NEW	Freer Street			100%		100%		0	0		180,000	0	0	0	0	0	0																				
NEW	Albury Street, 330m 100mm DICL			100%		100%		0	150,000	0	0	0	0	0	0	0	0																				
NEW	Cooedong Lane, 230m 100mm DICL			100%		100%		0	100,000	0	0	0	0	0	0	0	0																				
NEW	Salmon Street, 260m 100mm DICL			100%		100%		0	0	120,000	0	0	0	0	0	0	0																				
NEW	Cassidy Street, 400m 100mm DICL			100%		100%		0	0	0		150,000	0	0	0	0	0																				
NEW	Main Street, 500m of 100mm DICL			100%		100%			0		200,000	0	0	0	0	0	0																				
NEW	Gurwood Street			100%		100%		0	0	150,000	0	0	0	0	0	0	0																				
NEW	Bollon Park			100%		100%		0	200,000	0	0	0	0	0	0	0	0																				
NEW	Culcairn to Walla 200mm OPVC	50%		50%		100%		0	0		600,000	300,000	300,000	300,000	300,000	300,000	0																				
26	Reticulation for Developers - Urban	100%				100%		800,000	808,000	816,080	824,241	832,483	840,808	849,216	857,708	866,285	874,948	883,698	892,535	901,460	910,475	919,579	928,775	938,063	947,444	956,918	966,487	976,152	985,914	995,773	1,005,730	1,015,788	1,025,946	1,036,205	1,046,567	1,057,033	1,067,603
27	Reticulation for Developers - Non-Urban	100%				100%		60,000	60,600	61,206	61,818	62,436	63,061	63,691	64,328	64,971	65,621	66,277	66,940	67,610	68,286	68,968	69,658	70,355	71,058	71,769	72,487	73,211	73,944	74,683	75,430	76,184	76,946	77,715	78,493	79,277	80,070
	Renew Reticulation Mains - Non-Urban						**Renew Reticulation Mains - Non-Urban**	**200,000**	**200,000**	**200,000**	**400,000**	**25,000**	**270,000**	**375,000**	**3,190,000**	**260,000**	**0**	**180,000**	**2,500,000**	**870,000**	**20,000**	**60,000**	**960,000**	**440,000**	**1,010,000**	**2,220,000**	**90,000**	**90,000**	**1,270,000**	**1,920,000**	**340,000**	**1,140,000**	**90,000**	**180,000**	**230,000**	**370,000**	**100,000**
29	Renew Reticulation Mains - Non-Urban			100%		100%		200,000	200,000	200,000	400,000	25,000	270,000	0	0	260,000	0	120,000	210,000	350,000	0	0	0	0	190,000	0	0	0	0	330,000	240,000	270,000	50,000	140,000	230,000	270,000	100,000
CALC	Holbrook	25%		75%		100%								40,000	90,000				360,000	20,000	20,000	20,000	40,000	80,000		70,000	30,000			10,000		10,000					
CALC	Walbundrie	25%		75%		100%																			30,000	280,000					10,000					
CALC	Urana	25%		75%		100%									150,000								60,000	50,000	110,000				10,000		100,000		20,000			
CALC	Estella	25%		75%		100%								150,000	100,000																20,000					
CALC	Rand	25%		75%		100%																									20,000					
CALC	Humula	25%		75%		100%									5,000					20,000			20,000	20,000					80,000		10,000					
CALC	Tarcutta	25%		75%		100%									30,000									240,000				80,000	90,000							
CALC	The Rock	25%		75%		100%								60,000	50,000				220,000	90,000			340,000			80,000						10,000			30,000	
CALC	Oura	25%		75%		100%													360,000											10,000			20,000		10,000	
CALC	Uranquinty	25%		75%		100%								40,000	40,000			40,000						30,000	20,000	30,000	30,000			70,000	30,000	90,000				
CALC	Milbrulong	25%		75%		100%								10,000					120,000											200,000						

CALC	Oaklands	25%		75%		100%													700,000			20,000	20,000									200,000				40,000	
CALC	Woomargama	25%		75%		100%														30,000						10,000											
CALC	Pleasant Hills	25%		75%		100%																								900,000	370,000							
CALC	Mangoplah	25%		75%		100%													100,000				30,000		40,000		10,000					10,000					
CALC	Lockhart	25%		75%		100%								25,000	10,000					40,000							20,000		40,000	100,000	20,000	50,000					
CALC	Tooyal	25%		75%		100%																				500,000		90,000		430000							
CALC	Morundah	25%		75%		100%									5,000											70,000											
CALC	Collingullie	25%		75%		100%													300,000	300,000			400,000								20,000	20,000					
CALC	The Gap	25%		75%		100%																			500,000	600,000			240,000								
CALC	Henty	25%		75%		100%									40,000										20,000					30,000			10,000				
CALC	Brucedale	25%		75%		100%									2,600,000							20,000								150,000		90,000					
CALC	Currawarna	25%		75%		100%																				580,000											
CALC	Southern trunk	25%		75%		100%																								40,000		70,000					
CALC	Ladysmith	25%		75%		100%													130,000	20,000				20,000	100,000					20,000		80,000					
CALC	Western Trunk	25%		75%		100%																	50,000									30,000					
CALC	Walla Walla	25%		75%		100%								50,000	70,000			20,000													20,000	60,000	20,000			20,000	
	Renew Reticulation Mains - Urban						**Renew Reticulation Mains - Urban**	**1,250,000**	**950,000**	**550,000**	**400,000**	**1,400,000**	**2,150,000**	**3,210,000**	**3,655,000**	**2,085,000**	**1,620,000**	**1,030,000**	**1,120,000**	**1,080,000**	**810,000**	**900,000**	**1,440,000**	**1,080,000**	**1,340,000**	**1,000,000**	**710,000**	**930,000**	**680,000**	**1,780,000**	**1,300,000**	**1,920,000**	**1,340,000**	**380,000**	**790,000**	**1,670,000**	**330,000**
149	Renew Reticulation Mains - Urban			100%		100%		400,000	400,000	400,000		400,000	0	0	200,000	0	0	170,000	450,000	510,000	620,000	0	0	220,000	0	150,000	230,000	0	40,000	0	330,000	50,000	370,000	0	260,000	240,000	0
33	The Gap / Brucedale System - Non-Urban	25%		75%		100%		150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000																				
279	Gap Hall Coolamon	25%		75%		100%		0	0	0	0	0	0	0	0	0	0																				
281	Narrung Street			100%		100%		0	0	0	0	0	0	0	0	0	0																				
NEW	Heydon Avenue, 250m 100mm DICL	25%		75%		100%		150,000	0	0	0	0	0	0	0	0	0																				
NEW	Cox Avenue, Forest Hill, 600m 100mm DICL	25%		75%		100%		300,000	0	0	0	0	0	0	0	0	0																				
NEW	Mitchell Road, 2.3km 100mm & 150mm oPVC			100%		100%		0	0	0	0	0	0	250,000	0	0	0																				
NEW	Hampden Ave, 2km 150mm oPVC	25%		75%		100%		0	200,000	0	0	0	0	0	0	0	0																				
NEW	Forsyth St, 1km 200 & 250mm DICL			100%		100%		0	0	0		600,000	0	0	0	0	0																				
NEW	Doigs Lane, 6.1 km 63mm PE	25%		75%		100%		250,000	0	0	0	0	0	0	0	0	0																				
NEW	Morven Township	25%		75%		100%		0	100,000	0	0	100,000	0	100,000	100,000	0	0													20,000		40,000					
305	East St, Nth Wagga			100%		100%		0	0	0	0	0	0	0	0	0	0																				
NEW	Collingullie Township, 100mm oPVC			100%		100%		0	0	0	150,000	100,000	0	100,000	100,000	0	0																				
NEW	Yerong Creek, 100mm oPVC	25%		75%		100%		0	100,000	0	100,000	0	100,000	0	0	0	0																				
NEW	Sturt Highway, 1.4km 150mm DICL			100%		100%		0	0	0		0	0	400,000	0	0	0																				
CALC	East Bomen			100%		100%									150,000									10,000													
CALC	Bomen			100%		100%									255,000	250,000	60,000	30,000	120,000				50,000		40,000						20,000					120,000	10,000
CALC	Wagga Low Level	25%		75%		100%						50,000		200,000	100,000	170,000	10,000	30,000	100,000	180,000	30,000	110,000	170,000	470,000	280,000	60,000	100,000	250,000	90,000	30,000	230,000	370,000	210,000	150,000	80,000	280,000	10,000
CALC	Estella			100%		100%										140,000								60,000	70,000			50,000	100,000	220,000	120,000	160,000				100,000	
CALC	Wagga/Bellvue	25%		75%		100%								160,000		125,000	200,000	50,000		80,000		140,000	60,000	80,000	60,000	120,000				70,000	70,000	560,000	90,000		80,000	640,000	80,000
CALC	San Isidore			100%		100%										50,000		50,000					170,000					30,000		160,000		230,000	30,000			30,000	
CALC	Wagga High Level	25%		75%		100%							1,900,000	1,850,000	2,600,000	1,200,000	1,200,000	700,000	450,000	310,000	160,000	650,000	990,000	240,000	890,000	670,000	380,000	600,000	450,000	1,280,000	530,000	510,000	640,000	230,000	370,000	260,000	230,000
	Renew Trunk Mains - Urban						**Renew Trunk Mains - Urban**	**200,000**	**200,000**	**200,000**	**2,100,000**	**3,385,000**	**2,760,000**	**4,380,000**	**2,200,000**	**2,050,000**	**3,900,000**	**2,660,000**	**560,000**	**810,000**	**730,000**	**2,120,000**	**1,720,000**	**850,000**	**550,000**	**500,000**	**730,000**	**410,000**	**850,000**	**1,300,000**	**1,660,000**	**2,420,000**	**1,700,000**	**280,000**	**0**	**1,210,000**	**1,485,000**
253	Renew Trunk Mains - Urban			100%		100%		200,000	200,000	200,000	500,000	0	0	0	0	0	0	200,000	200,000	60,000	290,000	400,000	200,000	200,000	200,000	500,000	200,000	200,000	470,000	420,000	500,000	420,000	420,000	200,000		500,000	420,000
CALC	Bomen			100%		100%						485,000	60,000				210,000																				
CALC	Estella			100%		100%						300,000					2,200,000		150,000																		
CALC	Wagga Low Level			100%		100%											730,000	560,000						420,000	310,000				350,000	340,000			80,000			240,000	
CALC	Wagga/Bellevue			100%		100%																			40,000												
CALC	Wagga High Level			100%		100%							440,000	1,700,000	1,900,000	1,900,000	500,000	900,000	210,000		440,000	100,000	1,520,000	230,000			530,000	210,000	30,000	540,000	1,080,000	2,000,000	1,200,000	80,000		470,000	
CALC	Raw Water			100%		100%								2,600,000		150,000																					
CALC	Walla Walla			100%		100%									300,000																						
CALC	North Wagga			100%		100%						1,700,000					60,000														80,000						
MODEL	WTP - Copland St (I - J)		25%	75%		100%														750,000																	
MODEL	Plumpton Rd - Gregadoo PS (H1 - H2)		25%	75%		100%								80,000																							
MODEL	Gregadoo PS - Mitchell Road (H2 - H3)		25%	75%		100%											200,000	1,000,000																			
MODEL	10MG HL pumps (L - M)		50%	50%		100%							280,000																								
MODEL	Bomen Res (F - G)		25%	75%		100%							560,000																								
MODEL	East bomen suction main (G - N)		25%	75%		100%							680,000																								
MODEL	Bomen Res rising main (G2 - H2)		50%	50%		100%							360,000																								
MODEL	Bomen Res discharge (G)		25%	75%		100%																															105,000
MODEL	Oura Rd to NW TP (H - HI)		25%	75%		100%																															960,000
MODEL	Bomen rising main (HI - I)		25%	75%		100%					1,600,000																										
MODEL	LL rising main (K-22ML res)			100%		100%						900,000																									
MODEL	East Bomen Res (P - O)		25%	75%		100%																710,000															
MODEL	East Bomen (N - P)		25%	75%		100%							380,000																								
MODEL	Byrnes Rd (P - Q)		25%	75%		100%																910,000															
	Renew Trunk Mains - Non-Urban						**Renew Trunk Mains - Non-Urban**	**2,025,000**	**1,275,000**	**475,000**	**1,675,000**	**1,625,000**	**2,275,000**	**2,375,000**	**1,525,000**	**1,725,000**	**1,325,000**	**500,000**	**970,000**	**500,000**	**930,000**	**2,130,000**	**2,040,000**	**4,930,000**	**500,000**	**3,100,000**	**5,550,000**	**1,510,000**	**1,170,000**	**790,000**	**1,540,000**	**1,500,000**	**2,750,000**	**2,150,000**	**5,800,000**	**6,100,000**	**3,370,000**
254	Renew Trunk Mains - Non-Urban			100%		100%		200,000	200,000	200,000	500,000	0	0	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000
CALC	Southern Trunk			100%		100%																		830,000					170,000				130,000	630,000		300,000	70,000
209	Southern Trunk - Highway to New Reservoir 1.8km 450mm DICL	100%				100%		0	0	0	0	0	0	0	0	0	0																				
211	Bulgary Bore Rising Main - 7.5km 200mm oPVC			100%		100%		0	0	0	0	0	0	0	0	0	0																				
210	Low/High Level Rising Mains from CWS (alternate route Lake Albert Rd)			100%		100%		50,000	0	0	0	50,000	500,000	0	0	0	0																				
255	The Rock - Milbrulong BT Trunk Mains Replacement			100%		100%		0	0	0	0	0	0	0	0	0																					
NEW	Urana - Corowa (Oaklands)			100%		100%		0	250,000	250,000	250,000	250,000	250,000	250,000	0	0																					
NEW	County Boundary Rd, Milbrulong	25%		75%		100%		0	0		0	200,000	0	0	0	0																					
NEW	Culcairn Holbrook Road East of Morven, 5.1km 150mm oPVC			100%		100%		0	0		300,000	0	0	300,000	0	0	0																				
NEW	Olympic hwy Henty to Jennings Lane			100%		100%		0	0			500,000	500,000	500,000	500,000	500,000	0																				
NEW	Sturt Highway, 4km 300mm DICL			100%		100%		800,000	800,000	0	0	0	0	0	0	0	0																				
NEW	Simkin/Churchill/Sherwood 1.1km 250mm oPVC			100%		100%		550,000		0	0	0	0	0	0	0	0																				
NEW	The Rock Res Trunk Main 1.2km 250mm oPVC			100%		100%		400,000		0	0	0	0	0	0	0	0																				
NEW	Brucedale PS to Brucedale Reservor Trunk Mains Replacement			100%		100%		0			600,000	600,000	0	0	0	0	0																				
240	Renew Rail Crossings			100%		100%		25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000																				
309	Realign Mains - GHSC			100%		100%		0	0	0	0	0	0	0	0	0	0																				
CALC	Western Trunk			100%		100%													470,000		300,000						50,000				1,040,000	1,000,000	560,000	1,020,000			2,800,000
CALC	Holbrook			100%		100%																	380,000														
CALC	Oura			100%		100%																30,000															
CALC	Tarcutta			100%		100%																					50,000										
CALC	Estella			100%		100%																					350,000										
CALC	Rand			100%		100%																					200,000										
CALC	The Gap			100%		100%																					4,400,000	260,000									
CALC	Pleasant Hills			100%		100%																				2,600,000		750,000	500,000								
CALC	Ladysmith			100%		100%																								290,000							
CALC	Uranquinty			100%		100%																											900,000				
CALC	The Rock			100%		100%																	260,000														
CALC	Collingullie raw			100%		100%															130,000																
285	Woomargama			100%		100%		0	0	0	0	0	0	0	0	0	0																				
MODEL	Ladysmith PS to res offtake		50%	50%		100%																	400,000														
MODEL	Ladysmith res offtake to township		50%	50%		100%																	500,000														
MODEL	Southern Trunk (Uranquinty - The Rock Res S - T)		50%	50%		100%																													5,300,000	5,300,000	
MODEL	Mangoplah PS to Mangoplah		50%	50%		100%																		3,600,000													

MODEL	Jennings Rd - Culcairn		50%	50%		100%																1,600,000																		
MODEL	Culcairn - Gardiners Crossing WTP		50%	50%		100%																										660,000								
MODEL	Culcairn - Walla Walla (Benambra Rd)		50%	50%		100%						1000000	800000	500000	700000	800000																								
	SERVICES						**SERVICES**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**	**880,000**
36	Service Connections, new - Urban	100%				100%		500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000
37	Service Connections, new - Non-Urban	100%				100%		50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
38	Renew Services - Urban	25%		75%		100%		300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000
39	Renew Services - Non-Urban	25%		75%		100%		30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000
	METERS						**METERS**	**250,000**	**275,000**	**775,000**	**1,400,000**	**1,400,000**	**1,400,000**	**1,400,000**	**400,000**	**400,000**	**400,000**	**400,000**	**400,000**	**4,220,000**	**7,225,000**	**4,205,050**	**3,210,151**	**5,215,302**	**5,220,505**	**5,225,760**	**3,231,068**	**5,236,428**	**5,241,843**	**5,247,311**	**3,252,834**	**4,258,413**	**4,264,047**	**4,269,737**	**1,275,484**	**1,281,289**	**1,287,152**
17	Water meters replacement - Urban			100%		100%		150,000	150,000	150,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000
18	Water meters replacement - Non-Urban			100%		100%		50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
43	Remote metering - Non-Urban	100%				100%		25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
	Smart Meters - Initial install	90%		10%		100%					1,000,000	1,000,000	1,000,000	1,000,000																												
	Smart Meters - Replacement			100%		100%														320,000	320,000	320,000	320,000	320,000	320,000	320,000	320,000	320,000	320,000	320,000	320,000	320,000	320,000	320,000	320,000	320,000	320,000	320,000	320,000	320,000	320,000	320,000
283	Smart Meters - Pilot	100%				100%				500,000																																
167	WFS - Non-Urban - Upgrade	50%		50%		100%		-	-	-	-	-	25,000	25,000	25,000	25,000	25,000		25,000		25,000																				
168	WFS - Non-Urban - New	100%				100%		25,000	25,000	25,000	25,000	25,000	-	-	-	-	-	25,000		25,000																						
	Estella - The Gap (Pine Gulley Road) Magflow (Solar)	100%				100%			25,000																																
	Brucedale Trunk Magflow - Olympic Hwy (Solar)	100%				100%				25,000																																
				100%		100%														3,000,000	6,000,000	3,000,000	2,000,000	4,000,000	4,000,000	4,000,000	2,000,000	4,000,000	4,000,000	4,000,000	2,000,000	3,000,000	3,000,000	3,000,000							
			100%			100%														500,000	505,000	510,050	515,151	520,302	525,505	530,760	536,068	541,428	546,843	552,311	557,834	563,413	569,047	574,737	580,484	586,289	592,152			
								17,864,623	19,557,600	34,013,286	17,985,059	19,049,619	16,627,869	18,651,907	19,000,236	16,950,257	22,310,969	17,584,975	14,633,875	17,744,270	17,933,760	17,568,598	17,628,584	18,230,720	17,894,007	18,129,447	18,381,041	18,010,792	18,006,700	17,809,767	17,848,994	18,175,384	18,215,738	17,463,658	17,780,544	16,619,600	16,955,826			
																																						Total	554,627,704	

Table 3: Water Supply Equivalent Tenements Projection

Year (FY)	New Res ET's	Total Res ET's	Comm ET's	New Comm ET's	Total New ET's	Cumulative New ET's	Total ET's
20/21		30924.00	5600.00	92.00			36524.00
21/22	309.24	31233.24	5694.76	94.76	404.00	404.00	36928.00
22/23	312.33	31545.57	5792.36	97.60	409.94	813.94	37337.94
23/24	315.46	31861.03	5892.89	100.53	415.99	1229.92	37753.92
24/25	318.61	32179.64	5996.44	103.55	422.16	1652.08	38176.08
25/26	321.80	32501.43	6103.09	106.65	428.45	2080.53	38604.53
26/27	325.01	32826.45	6212.95	109.85	434.87	2515.40	39039.40
27/28	328.26	33154.71	6326.09	113.15	441.41	2956.81	39480.81
28/29	331.55	33486.26	6442.64	116.54	448.09	3404.90	39928.90
29/30	334.86	33821.12	6562.68	120.04	454.90	3859.80	40383.80
30/31	338.21	34159.33	6686.32	123.64	461.85	4321.65	40845.65
31/32	341.59	34500.93	6813.67	127.35	468.94	4790.59	41314.59
32/33	345.01	34845.94	6944.84	131.17	476.18	5266.77	41790.77
33/34	348.46	35194.40	7079.94	135.11	483.56	5750.34	42274.34
34/35	351.94	35546.34	7219.10	139.16	491.10	6241.44	42765.44
35/36	355.46	35901.80	7362.43	143.33	498.80	6740.24	43264.24
36/37	359.02	36260.82	7510.07	147.63	506.65	7246.89	43770.89
37/38	362.61	36623.43	7662.13	152.06	514.67	7761.56	44285.56
38/39	366.23	36989.66	7818.75	156.62	522.86	8284.42	44808.42
39/40	369.90	37359.56	7980.07	161.32	531.22	8815.64	45339.64
40/41	373.60	37733.16	8146.24	166.16	539.76	9355.39	45879.39
41/42	377.33	38110.49	8317.38	171.15	548.48	9903.87	46427.87
42/43	381.10	38491.59	8493.67	176.28	557.39	10461.26	46985.26
43/44	384.92	38876.51	8675.24	181.57	566.49	11027.74	47551.74
44/45	388.77	39265.27	8862.25	187.02	575.78	11603.53	48127.53
45/46	392.65	39657.93	9054.88	192.63	585.28	12188.81	48712.81
46/47	396.58	40054.51	9253.29	198.41	594.99	12783.79	49307.79
47/48	400.55	40455.05	9457.64	204.36	604.90	13388.70	49912.70
48/49	404.55	40859.60	9668.13	210.49	615.04	14003.74	50527.74
49/50	408.60	41268.20	9884.94	216.80	625.40	14629.14	51153.14

Table 4: Developer Charges Calculations

Year	Estimated expenditure (new) (2021/22$)	Estimated expenditure (existing) (2021/22$)	Estimated expenditure (total) (2021/22$)	PV factor	PV of expenditure (@ 5%)	Number of new ETs (ET)	PV new ETs (ET)
21/22	$268,000	$486,391	$754,391	1.00	754,391	404	404
22/23	$3,527,250	$486,391	$4,013,641	0.95	3,822,516	410	390
23/24	$2,138,000	$486,391	$2,624,391	0.91	2,380,400	416	377
24/25	$2,520,100	$486,391	$3,006,491	0.86	2,597,120	422	365
25/26	$2,737,000	$486,391	$3,223,391	0.82	2,651,892	428	352
26/27	$917,250	$486,391	$1,403,641	0.78	1,099,790	435	341
27/28	$1,171,020	$486,391	$1,657,411	0.75	1,236,786	441	329
28/29	$4,148,500	$486,391	$4,634,891	0.71	3,293,931	448	318
29/30	$8,022,600	$486,391	$8,508,991	0.68	5,759,220	455	308
30/31	$4,315,600	$486,391	$4,801,991	0.64	3,095,406	462	298
31/32	$1,690,620	$486,391	$2,177,011	0.61	1,336,496	469	288
32/33	$4,212,760	$486,391	$4,699,151	0.58	2,747,497	476	278
33/34	$2,926,350	$486,391	$3,412,741	0.56	1,900,342	484	269
34/35	$4,030,650	$486,391	$4,517,041	0.53	2,395,484	491	260
35/36	$3,785,751	$486,391	$4,272,142	0.51	2,157,722	499	252
36/37	$2,390,902	$486,391	$2,877,293	0.48	1,384,027	507	244
37/38	$3,938,605	$486,391	$4,424,996	0.46	2,027,142	515	236
38/39	$732,110	$486,391	$1,218,501	0.44	531,628	523	228
39/40	$1,051,668	$486,391	$1,538,059	0.42	639,095	531	221
40/41	$3,942,028	$486,391	$4,428,419	0.40	1,752,476	540	214
41/42	$783,943	$486,391	$1,270,334	0.38	478,776	548	207

42/43	$1,695,411	$486,391	$2,181,802	0.36	783,141	557	200
43/44	$3,329,184	$486,391	$3,815,575	0.34	1,304,354	566	194
44/45	$1,671,513	$486,391	$2,157,904	0.33	702,552	576	187
45/46	$1,670,347	$486,391	$2,156,738	0.31	668,735	585	181
46/47	$680,337	$486,391	$1,166,728	0.30	344,538	595	176
47/48	$3,295,584	$486,391	$3,781,975	0.28	1,063,646	605	170
48/49	$3,313,139	$486,391	$3,799,530	0.27	1,017,698	615	165
49/50	$4,211,002	$486,391	$4,697,393	0.26	1,198,275	625	160
	79,117,224	14,105,351	93,222,575		51,125,077	14629	7,612

Capital Charge per ET **$6,717**

Appendix B

Reduction Amount for Water supply

Table 5 – Reduction Amount by NPV of annual bills method

		Annual Bill (TRB)		660	$ per ET		
		Annual OMA Cost		457	$ per ET		
		Net Income		203	$ per ET		
Year	Total ETs	New ETs per year	PV (New Ets) over 30 years @ 5%	Cumulative New ETs	Net Income from New ETs ($'000)	PV (Net Income) from new ETs over 30 years @ 5% ($'000)	Reduction Amount ($ per ET)
	(1)	(2) = $(1)_i - (1)_{i-1}$	(3) = PV of (2)	(4)	(5) = (4) * ('C)	(6) = PV of (5)	(7) = (6) / (3)
19/20	33,226						
20/21	33,817						
2021/22	36,928	404		404	82		
2022/23	37,338	410	**7,612**	814	165	**17,301**	**2,273**
2023/24	37,754	416	**7,569**	1,230	250	**18,080**	**2,389**
2024/25	38,176	422	**7,517**	1,652	335	**18,810**	**2,502**
2025/26	38,605	428	**7,456**	2,081	422	**19,488**	**2,614**
2026/27	39,039	435	**7,385**	2,515	511	**20,111**	**2,723**
2027/28	39,481	441		2,957	600		
2028/29	39,929	448		3,405	691		
2029/30	40,384	455		3,860	784		
2030/31	40,846	462		4,322	877		
2031/32	41,315	469		4,791	972		
2032/33	41,791	476		5,267	1,069		
2033/34	42,274	484		5,750	1,167		
2034/35	42,765	491		6,241	1,267		
2035/36	43,264	499		6,740	1,368		
2036/37	43,771	507		7,247	1,471		
2037/38	44,286	515		7,762	1,576		
2038/39	44,808	523		8,284	1,682		
2039/40	45,340	531		8,816	1,790		
2040/41	45,879	540		9,355	1,899		
2041/42	46,428	548		9,904	2,010		
2042/43	46,985	557		10,461	2,124		
2043/44	47,552	566		11,028	2,239		
2044/45	48,128	576		11,604	2,356		
2045/46	48,713	585		12,189	2,474		
2046/47	49,308	595		12,784	2,595		
2047/48	49,913	605		13,389	2,718		
2048/49	50,528	615		14,004	2,843		
2049/50	51,153	625		14,629	2,970		
		5yr Ave Reduction		2,500			

Appendix C

Outline of Legislation

Source: 2016 Developer Charges Guidelines for Water Supply, Sewerage and Stormwater

Outline of Legislation

Local Government Act 1993

The power for local government councils to levy developer charges for water supply, sewerage and stormwater derives from section 64 of the *Local Government Act 1993* by means of a cross-reference in that Act to the relevant provisions of the *Water Management Act 2000*.

Section 64 of the Local Government Act states that:

> Division 5 of Part 2 of Chapter 6 of the Water Management Act 2000 applies to a council exercising function under this Division in the same way as it applies to a water supply authority exercising functions under that Act.

Environmental Planning and Assessment Act 1979

Prior to the introduction of the *Local Government Act in 1993*, councils used the provisions of section 94 of the *Environmental Planning and Assessment Act 1979* to obtain developer contributions for water supply and sewerage services. As part of the *Local Government (Consequential Provisions) Act 1993*, amendment was made to the *Environmental Planning and Assessment Act* so that section 94 no longer applied for water supply and sewerage services.

However, Councils can levy developer charges for stormwater under either Local Government Act or Water Management Act.

Water Management Act 2000

Section 305 (1) of the *Water Management Act* states that:

> (1) A person may apply to a water supply authority for a certificate of compliance for development carried out, or proposed to be carried out, within the water supply authority's area.

Section 306 (2) and (3) of the Water Management Act states that:

> (2) as a pre-condition to granting a certificate of compliance for development, a water supply authority may, by notice in writing served on the applicant, require the applicant to do either or both of the following:
>
> (a) to pay a specified amount to the Authority by way of contribution towards the cost of such water management works as are specified in the notice, being existing works or projected works, or both,
>
> (b) To construct water management works to serve the development.

(3) In calculating an amount for the purposes of subsection (2) (a):

(a) the value of existing water management works and the estimated cost of projected water management works may be taken into consideration, and

(b) the amount of any government subsidy or similar payment is not to be deducted from the relevant value or cost of the water management works, and

(c) Consideration is to be given to any guidelines issued for the time being for the purposes of this section by the Minister.

In 2015, the Minister for Lands and Water became responsible for non-metropolitan NSW town water services. The Minister is responsible for the issue of guidelines for water utilities on the calculation of water supply, sewerage and stormwater developer charges.

Note: Use of moneys raised from developer charges is discussed in section 2.8 on page10 of the guidelines.

Local Government (Savings and Transitional) Regulation 1993

The Local Government (Savings and Transitional) Regulation 1993 covers the matter of developer contributions which had previously been obtained by councils under the *Environmental Planning and Assessment Act* as follows:

(9) Any monetary contribution held by a council immediately before the commencement of this Regulation, being a contribution arising from a condition:

(a) that was imposed under section 94 of the *Environmental Planning and Assessment Act 1979*; and

(b) that specifies that the contribution is to be applied towards providing specified water or sewerage services or towards providing water or sewerage services generally,

Is to be applied towards the construction of works within the meaning of Division 2 of Part 3 of the *Water Supply Authorities Act 1987*, or towards the repayment of money borrowed for the construction of such works, and is not to be applied towards any other purpose.

Appendix D

Comparison of Similar LWU Development Servicing Charge